Postabortion Care Curriculum: Reference Manual

December 2010
The United States Agency For International Development (USAID) Postabortion Care (PAC) Working Group was established in 1994 to promote quality postabortion care in order to reduce maternal morbidity and mortality and future unplanned pregnancies. The USAID PAC Working Group provides current information to and acts as a liaison for the Global Health Bureau, USAID/Washington to USAID Missions, cooperating agencies, consultants, project design teams, the PAC Consortium and other relevant groups.

ACCESS-FP, a five-year, global program sponsored by the United States Agency for International Development (USAID), is an associate award under the ACCESS Program. ACCESS-FP focuses on meeting the family planning and reproductive health needs of women in the postpartum period. Interventions are designed to complement those of the ACCESS Program in the promotion and scale-up of postpartum family planning through community and clinical interventions. ACCESS-FP works to reposition family planning through integration with maternal, newborn and child health programs, including the prevention of mother-to-child transmission of HIV. For more information about ACCESS-FP, please visit www.accesstohealth.org/about/assoc_fp.htm.

Published by:
Jhpiego Corporation
1615 Thames Street
Baltimore, Maryland 21231, USA
www.jhpiego.org

© 2010 by Jhpiego Corporation. All rights reserved.

Authors:
Frances Ganges, BS, MPH, CNM, Independent Consultant, Jhpiego
Carolyn Curtis, BSN, CNM, MSN, FACNM, Team Leader, USAID Postabortion Care Working Group

Contributors:
Tsigué Pleah, MD, MPH, Jhpiego
Lois Schaefer, RN, MPH, USAID Postabortion Care Working Group

Editor:
Dana Lewison, Jhpiego

Graphic Designers:
Jamie Wolfe, Jhpiego
Youngae Kim, Jhpiego

ISBN: 0-929817-96-6

TRADEMARKS: All brand and product names are trademarks or registered trademarks of their respective companies.
Table of Contents

Acknowledgments ........................................................................................................................................ xiii
Abbreviations and Acronyms .................................................................................................................... xiv
Preface ........................................................................................................................................................ xv

Module 1 Session 1
Introduction to Postabortion Care: Issues Surrounding Miscarriage, Induced Abortion and the Delivery of PAC Services

Summary ....................................................................................................................................................... 1
Session Objectives ...................................................................................................................................... 1
Defining Terms .............................................................................................................................................. 1
Magnitude of Maternal Mortality and Morbidity ...................................................................................... 1
   Every Minute Around the World .............................................................................................................. 1
   Maternal Mortality and Morbidity: The Impact of Spontaneous and Induced Abortion .................. 3
Spontaneous Loss of Pregnancy .................................................................................................................. 4
Induced Abortion ........................................................................................................................................... 5
   Why Women Resort to Abortion ............................................................................................................. 5
Factors That Affect Whether Women Seek Postabortion Care ............................................................. 6
Delays in Seeking Care ................................................................................................................................. 7
Understanding Your Country’s Policies Regarding the Provision of PAC Services .............................. 8
Examples of PAC Policies and Guidelines ................................................................................................. 9

Module 1 Session 2
Postabortion Care: The PAC Model

Summary ..................................................................................................................................................... 11
Session Objectives ...................................................................................................................................... 11
Postabortion Care ....................................................................................................................................... 11
Definition of Postabortion Care .................................................................................................................. 11
   Benefits of Providing Postabortion Care ................................................................................................ 12
Components of the PAC Model ................................................................................................................... 12
   Integrating Counseling .......................................................................................................................... 12
   Component 1: Emergency Treatment .................................................................................................... 13
   Component 2: Family Planning Counseling and Provision, and where there is disease prevalence
   and resources are available, STI Evaluation and Treatment, and HIV Counseling and/or
   Referral for HIV Testing ........................................................................................................................ 13
   Component 3: Community Empowerment through Community Awareness and Mobilization ..... 14
# Postabortion Care Curriculum: Reference Manual

## Module 1 Session 3

**Postabortion Care: Values and Attitudes**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>19</td>
</tr>
<tr>
<td>Session Objectives</td>
<td>19</td>
</tr>
<tr>
<td>Values and Attitudes in Postabortion Care</td>
<td>19</td>
</tr>
<tr>
<td>Provider Response</td>
<td>20</td>
</tr>
<tr>
<td>Emotional Response of PAC Clients</td>
<td>20</td>
</tr>
<tr>
<td>A Word about Working with Adolescents</td>
<td>21</td>
</tr>
</tbody>
</table>

## Module 2 Session 1

**PAC Core Component One—Emergency Treatment: Preparation and Client Assessment**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>25</td>
</tr>
<tr>
<td>Session Objectives</td>
<td>25</td>
</tr>
<tr>
<td>Emergency Treatment</td>
<td>26</td>
</tr>
<tr>
<td>Emergency Treatment Has Several Main Aspects</td>
<td>26</td>
</tr>
<tr>
<td>Rapid Assessment</td>
<td>27</td>
</tr>
<tr>
<td>General Management</td>
<td>27</td>
</tr>
<tr>
<td>Rapid Initial Assessment</td>
<td>28</td>
</tr>
<tr>
<td>Presenting Signs and Symptoms</td>
<td>29</td>
</tr>
<tr>
<td>Different Types of Abortion</td>
<td>30</td>
</tr>
<tr>
<td>Threatened Abortion</td>
<td>30</td>
</tr>
<tr>
<td>Inevitable Abortion/Miscarriage</td>
<td>30</td>
</tr>
<tr>
<td>Spontaneous Abortion or Miscarriage</td>
<td>30</td>
</tr>
<tr>
<td>Induced Abortion</td>
<td>31</td>
</tr>
<tr>
<td>Incomplete Abortion</td>
<td>31</td>
</tr>
<tr>
<td>Complete Abortion</td>
<td>31</td>
</tr>
<tr>
<td>Septic Abortion</td>
<td>31</td>
</tr>
<tr>
<td>Missed Abortion</td>
<td>31</td>
</tr>
<tr>
<td>History</td>
<td>32</td>
</tr>
<tr>
<td>Ensuring Clients’ Confidentiality, Privacy and Dignity</td>
<td>33</td>
</tr>
<tr>
<td>Rearranging Patient Service Areas</td>
<td>34</td>
</tr>
<tr>
<td>Youth-Friendly Services</td>
<td>34</td>
</tr>
<tr>
<td>Integrating Counseling: Addressing the Client’s Feelings</td>
<td>35</td>
</tr>
<tr>
<td>Physical Examination</td>
<td>35</td>
</tr>
<tr>
<td>Abdominal Examination</td>
<td>35</td>
</tr>
<tr>
<td>Speculum Examination</td>
<td>36</td>
</tr>
<tr>
<td>Bimanual Examination</td>
<td>36</td>
</tr>
<tr>
<td>Laboratory Tests</td>
<td>37</td>
</tr>
<tr>
<td>Vaginal Bleeding in Early Pregnancy</td>
<td>37</td>
</tr>
<tr>
<td>General Guidelines for Management of Vaginal Bleeding</td>
<td>38</td>
</tr>
<tr>
<td>Referral</td>
<td>42</td>
</tr>
<tr>
<td>Sample PAC Client Information Form</td>
<td>43</td>
</tr>
<tr>
<td>Pocket Copies of Provider Job Aids</td>
<td>48</td>
</tr>
</tbody>
</table>
Module 2 Session 2

Emergency Treatment: Uterine Evacuation Methods

Summary ..................................................................................................................................................... 55
Session Objectives ...................................................................................................................................... 55
Uterine Evacuation Methods ....................................................................................................................... 55
Vacuum Aspiration ...................................................................................................................................... 55
  Manual Vacuum Aspiration and Foot Pump Suction Evacuation .......................................................... 55
  Electric Vacuum Aspiration ................................................................................................................... 57
  Contraindications for Manual Vacuum Aspiration and Foot Pump Suction Evacuation Use ............... 58
  Precautions for Foot Pump and Manual Vacuum Aspiration Use ........................................................ 58
Sharp Curettage (Dilatation and Curettage) ............................................................................................... 59
  Indications for Sharp Curettage ............................................................................................................ 60
  Contraindications for Sharp Curettage ................................................................................................. 60
Medication or Pharmacological Methods .................................................................................................... 61
  Misoprostol ........................................................................................................................................... 61
Expectant Management .............................................................................................................................. 61
Counseling Before, During and After Uterine Evacuation ......................................................................... 62

Module 2 Session 3

Emergency Treatment: Pain Management

Summary ..................................................................................................................................................... 65
Session Objectives ...................................................................................................................................... 65
Pain Management for Vacuum Aspiration .................................................................................................. 65
  Discussing Pain Management with the Client ...................................................................................... 65
Assessing the PAC Patient for Pain ............................................................................................................ 66
  The Numerical Pain Scale .................................................................................................................... 67
  General Requirements of Pain Control during Uterine Evacuation while a Client Is Awake .......... 67
Informed Consent ........................................................................................................................................ 68
Types and Origin of Pain ............................................................................................................................. 68
Types of Pain Control Medication ............................................................................................................... 68
Use of Analgesia ......................................................................................................................................... 69
  Complications of Narcotic Analgesics and Anxiolytics .................................................................... 70
Use of Anesthesia ....................................................................................................................................... 70
  Complications of Local Anesthetics and Appropriate Treatment ......................................................... 70
Paracervical Block ....................................................................................................................................... 71
  Precautions ........................................................................................................................................... 71
  How to Perform a Paracervical Block ................................................................................................. 72
Module 2 Session 4

PAC Core Component One—Emergency Treatment: Uterine Evacuation:
Dilatation and Curettage

Summary.................................................................................................................75
Session Objectives.................................................................................................75
Sharp Curettage ....................................................................................................75
  Basic Principles of Sharp Curettage...................................................................76
Steps for Sharp Curettage ..................................................................................76
Post-Procedure Care .........................................................................................80

Module 2 Session 5

Emergency Treatment—Uterine Evacuation: Vacuum Aspiration

Summary.................................................................................................................83
Session Objectives.................................................................................................83
A Word about MVA Instruments .........................................................................83
Types of Vacuum Aspiration ...............................................................................84
Manual Vacuum Aspiration ................................................................................85
  Basic Principles of MVA ...................................................................................85
Pre-Procedure Care .............................................................................................86
Preparing VA Instruments ................................................................................88
Performing the VA Procedure ...........................................................................89
  Infection Prevention...........................................................................................92
Post–Procedure Care ..........................................................................................92
Selection of Adapters .........................................................................................93
Management of Problems during the VA Procedure ........................................94
  Background.........................................................................................................94
Technical Problems.............................................................................................94
  MVA ..................................................................................................................94
  Full Syringe.......................................................................................................94
  Cannula Withdrawn Prematurely—MVA, EVA and Foot Pump Vacuum .......95
  Cannula Clogged ..............................................................................................95
  MVA Syringe Does Not Hold Vacuum..............................................................96
Procedural Problems..........................................................................................96
  Less than Expected Tissue .............................................................................96
  Incomplete Evacuation .....................................................................................96
  All POC Passed before the VA ......................................................................96
  Uterine Perforation .........................................................................................96
Other Problems ................................................................................................97
  Vaginal Bleeding Not Due to Pregnancy .........................................................97
  Ectopic Pregnancy ..........................................................................................97
Postabortion Care (Job Aid) .............................................................................98
Chart Checklist and Post-Procedure Record for Postabortion Care ...............99
When a Pregnancy Ends (Job Aid) .................................................................101
### Module 2 Session 6

#### Emergency Treatment: Postabortion Complications and Management

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>105</td>
</tr>
<tr>
<td>Session Objectives</td>
<td>105</td>
</tr>
<tr>
<td>Common Postabortion Complications</td>
<td>105</td>
</tr>
<tr>
<td>Shock</td>
<td>106</td>
</tr>
<tr>
<td>- Signs and Symptoms of Shock</td>
<td>106</td>
</tr>
<tr>
<td>- Initial Treatment for Shock</td>
<td>106</td>
</tr>
<tr>
<td>- Definitive Management of Shock</td>
<td>107</td>
</tr>
<tr>
<td>Severe Vaginal Bleeding</td>
<td>108</td>
</tr>
<tr>
<td>- Signs of Severe Vaginal Bleeding</td>
<td>108</td>
</tr>
<tr>
<td>- Initial Treatment of Severe Vaginal Bleeding</td>
<td>108</td>
</tr>
<tr>
<td>- Definitive Management of Severe Vaginal Bleeding</td>
<td>109</td>
</tr>
<tr>
<td>Infection or Sepsis</td>
<td>110</td>
</tr>
<tr>
<td>- Signs and Symptoms of Infection or Sepsis</td>
<td>110</td>
</tr>
<tr>
<td>- Initial Treatment of Infection or Sepsis</td>
<td>110</td>
</tr>
<tr>
<td>- Definitive Management of Infection or Sepsis</td>
<td>111</td>
</tr>
<tr>
<td>- Disseminated Intravascular Coagulation (DIC)</td>
<td>112</td>
</tr>
<tr>
<td>Intra-Abdominal Injury</td>
<td>112</td>
</tr>
<tr>
<td>- Signs and Symptoms of Intra-Abdominal Injury</td>
<td>112</td>
</tr>
<tr>
<td>- Initial Treatment of Intra-Abdominal Injury</td>
<td>113</td>
</tr>
<tr>
<td>- Definitive Treatment of Intra-Abdominal Injury</td>
<td>113</td>
</tr>
<tr>
<td>Uterine Perforation</td>
<td>114</td>
</tr>
<tr>
<td>- Signs of Uterine Perforation before VA</td>
<td>114</td>
</tr>
<tr>
<td>- Signs of Uterine Perforation during VA</td>
<td>114</td>
</tr>
<tr>
<td>- Initial Treatment of Uterine Perforation</td>
<td>115</td>
</tr>
<tr>
<td>Referral Guidelines</td>
<td>115</td>
</tr>
<tr>
<td>- Preparing for Client Referral and Transport</td>
<td>116</td>
</tr>
<tr>
<td>- During Transport</td>
<td>116</td>
</tr>
</tbody>
</table>

### Module 3 Session 1

#### Family Planning Counseling and Service Provision, STI Evaluation and Treatment, and HIV Counseling and/or Testing

**Family Planning Counseling and Service Provision**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>125</td>
</tr>
<tr>
<td>Session Objectives</td>
<td>125</td>
</tr>
<tr>
<td>Unmet Need for Family Planning</td>
<td>126</td>
</tr>
<tr>
<td>Postabortion Family Planning</td>
<td>126</td>
</tr>
<tr>
<td>Family Planning Counseling</td>
<td>128</td>
</tr>
<tr>
<td>- Informed Choice</td>
<td>128</td>
</tr>
<tr>
<td>- Family Planning Information</td>
<td>129</td>
</tr>
<tr>
<td>- Personal Situation</td>
<td>131</td>
</tr>
<tr>
<td>- Clinical Condition</td>
<td>134</td>
</tr>
</tbody>
</table>
Module 3 Session 2

Family Planning Counseling and Service Provision, STI Evaluation and Treatment, and HIV Counseling and/or Testing

STI and HIV Service Provision

Session Objectives

Presenting Symptoms

Symptoms, Complications and Treatment of Common STIs

Cervical Infections

Chlamydia

Gonorrhea

Pelvic Inflammatory Disease

Genital Ulcers

Syphilis

Chancroid

Genital Herpes

Viral Infections

Human Papillomavirus

Vaginal Infections

Trichomoniasis

RTIs That Are Not Considered STIs

Bacterial Vaginosis

Candidiasis (Moniliasis)

Other Sexually Transmitted Infections

Can Sexually Transmitted Infections Be Treated?

Approaches to STI Diagnosis

Etiologic Diagnosis

Clinical Diagnosis

Syndromic Diagnosis

Counseling the Client about Sexuality and STI/HIV Risk: Getting Started

Getting Started

General Questions
Postabortion Care Curriculum: Reference Manual

Module 4 Session 1
Infection Prevention and Processing VA Equipment for Reuse

Summary .................................................................................................................................................. 205
Session Objectives ................................................................................................................................. 205
Introduction to Infection Prevention in PAC Services ............................................................................ 205
Standard Precautions ............................................................................................................................... 206
Hand Hygiene ......................................................................................................................................... 208
  Handwashing ...................................................................................................................................... 209
  Hand Antisepsis .............................................................................................................................. 210
  Antiseptic Handrub .......................................................................................................................... 210
  Surgical Handscrub ......................................................................................................................... 211
  Antisepsis ....................................................................................................................................... 212
No-Touch Technique .............................................................................................................................. 212
Gloves ....................................................................................................................................................... 213
Types of Gloves ........................................................................................................................................ 213
Personal Protective Equipment ................................................................................................................... 215
Safe Handling of Sharps ............................................................................................................................ 216
Post-Exposure Prophylaxis ....................................................................................................................... 218
Waste Disposal ....................................................................................................................................... 219
    Disposal of Contaminated Wastes ........................................................................................................ 219
Housekeeping ........................................................................................................................................... 219
    Cleaning Procedures for Client Care Areas ....................................................................................... 220
Processing Equipment and Other Items for Reuse .................................................................................. 221
    Decontamination ............................................................................................................................... 221
    Cleaning .......................................................................................................................................... 222
Sterilization or High-Level Disinfection (HLD) ...................................................................................... 223
Storage ..................................................................................................................................................... 226
Tables and Figures

Table 1.1-1: Estimates of Maternal Mortality Ratios ................................................................. 2
Table 1.1-2: Estimated Number of Deaths Due to Unsafe Abortion by Age, 2003 ..................... 3
Table 1.2-1: Core Components 1, 2 and 3: Emergency Treatment—Provision of Care by Level of Health Care Facility and Staff (adapted from WHO 1995) ........................................ 15
Table 2.1-1: Rapid Initial Assessment .......................................................................................... 28
Table 2.1-2: Signs of Abortion .................................................................................................... 32
Table 2.1-3: Addressing the Postabortion Client’s Feelings ...................................................... 39
Table 2.1-4: Determining Uterine Size in the First Trimester .................................................. 39
Table 2.1-5: Diagnosis of Vaginal Bleeding in Early Pregnancy .......................................... 40
Table 2.2-1: Comparisons of Electric Vacuum Aspiration, Foot Pump Suction Evacuation and Manual Vacuum Aspiration .................................................................................. 58
Table 2.2-2: Comparison of Vacuum Aspiration and Sharp Curettage ...................................... 59
Table 2.3-1: Use of Analgesia in Vacuum Aspiration ................................................................. 69
Table 2.3-2: Characteristics of Anesthesia .................................................................................. 70
Table 2.3-3: Characteristics of Xylocaine and Nesacaine ......................................................... 72
Table 2.5.1: Cannula, Adapter and Syringe Attributes ............................................................... 94
Table 2.5.2: Approximating Uterine Size and Selecting Cannula Size .................................... 94
Table 2.6-1: Assessment of Risk for Septic Shock ................................................................. 110
Table 3.1-1: Individual Factors for Family Planning Counseling during Postabortion Care ....... 132
Table 3.1-2: Guidelines for Contraceptive Use, by Clinical Condition ..................................... 135
Table 3.1-3: Guidelines for Selection of Contraception, by Method ....................................... 140
Table 3.1-4: REDI Framework (Short Version) ......................................................................... 148
Table 3.1-5: Classification for Use of Contraceptive Methods .............................................. 149
Table 3.2-1: Presenting Symptoms of Common STIs ............................................................... 164
Table 3.2-2: Recommended Outpatient Treatment for PID .................................................... 169
Table 3.2-3: Symptoms and Likely Diagnosis of Common Reproductive Tract Infections ...... 180
Table 4.1-1: Standard Precautions—Key Components ............................................................. 208
Table 4.1-2: Glove Requirements for Common PAC Procedures ........................................... 215
Table 4.1-3: Cleaning Schedule: Client Care Areas ................................................................. 221
Table 4.1-4: Recommended Dilutions of Bleach ................................................................. 228
Table 4.1-5: Preparing Dilute Chlorine Solutions from Dry Powders: Recommended Dilutions of Chlorine-Releasing Compounds ................................................................. 229
Table 4.1-6: High-Level Disinfection of Instruments .............................................................. 230
Table 4.1-7: Antiseptic Effectiveness ......................................................................................... 232
Acknowledgments

The global Postabortion Care Curriculum was developed through the support of the United States Agency for International Development Postabortion Care Working Group under the leadership of Carolyn Curtis, CNM, MSN, FACNM, Certified Nurse Midwife/Public Health Specialist. Members of the Postabortion Care Working Group who served during the development of the curriculum include: Mary Vandenbroucke, Sarah Harbison, Gary Cook, Lily Kak, Mary Ellen Stanton, Patricia Stephenson, Willa Pressman, Sandra Jordan, Marguerite Farrell, Lindsay Stewart, Maureen Norton, Shawn Malarcher, Lois Schaefer, Patricia MacDonald, Rushna Ravji, Beverly Johnston, Dana Vogel, Michal Avni, Erin Mielke, Margaret D’Adamo, Jewel Gausman, Jennifer Mason, Megan Matthews, Ishrat Husain, Chelsea Smart, Emily Roseman and Jeff Speiler.

We would like to thank our many colleagues in the field who made field-testing the curriculum possible. They include:

**Bolivia**
Dr. Rocio Lara, USAID/Bolivia
Betty Farrell, CNM, MPH, EngenderHealth
Melinda Pavin, EngenderHealth
Dr. Didar Olaudi, EngenderHealth
Dr. Jose del Barco, EngenderHealth
Gloria Metcalfe, Midwife, MPH, Consultant, EngenderHealth

**Haiti**
Dr. Pierre Mercier, USAID/Haiti*
Dr. Lucito Jeannis, Jhpiego
Dr. Jean Bernard Fevrier, Jhpiego
Dr. Gérard Evens Lucien, Consultant

Their comments and contributions were invaluable in strengthening the curriculum!

This publication was made possible through support provided by the Service Delivery Improvement Division, Office of Population and Reproductive Health, Bureau for Global Health, U.S. Agency for International Development, under the terms of Associate Cooperative Agreement #GPO-A-00-05-00025-00, and Leader with Associates Cooperatives Agreement #GHS-A-00-04-00002-00. The opinions herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.

* Deceased, October 27, 2010
## Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>Acquired immunodeficiency syndrome</td>
</tr>
<tr>
<td>ARS</td>
<td>Acute retroviral syndrome</td>
</tr>
<tr>
<td>ART</td>
<td>Antiretroviral therapy</td>
</tr>
<tr>
<td>D&amp;C</td>
<td>Dilatation and curettage</td>
</tr>
<tr>
<td>DIC</td>
<td>Disseminated intravascular coagulation</td>
</tr>
<tr>
<td>EmOC</td>
<td>Emergency obstetric care</td>
</tr>
<tr>
<td>EVA</td>
<td>Electric vacuum aspiration</td>
</tr>
<tr>
<td>FBO</td>
<td>Faith-based organization</td>
</tr>
<tr>
<td>FIGO</td>
<td>International Federation of Gynecology and Obstetrics</td>
</tr>
<tr>
<td>FP</td>
<td>Family planning</td>
</tr>
<tr>
<td>FSE</td>
<td>Foot pump suction evacuation</td>
</tr>
<tr>
<td>HIV</td>
<td>Human immunodeficiency virus</td>
</tr>
<tr>
<td>HLD</td>
<td>High-level disinfection</td>
</tr>
<tr>
<td>HPV</td>
<td>Human papillomavirus</td>
</tr>
<tr>
<td>HSV</td>
<td>Herpes simplex virus</td>
</tr>
<tr>
<td>ICM</td>
<td>International Confederation of Midwives</td>
</tr>
<tr>
<td>ICN</td>
<td>International Council of Nurses</td>
</tr>
<tr>
<td>ICPD</td>
<td>International Conference on Population and Development</td>
</tr>
<tr>
<td>IM</td>
<td>Intramuscular</td>
</tr>
<tr>
<td>IUD</td>
<td>Intrauterine contraceptive device</td>
</tr>
<tr>
<td>IV</td>
<td>Intravenous</td>
</tr>
<tr>
<td>LGV</td>
<td>Lymphogranuloma venereum</td>
</tr>
<tr>
<td>LMP</td>
<td>Last menstrual period</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goal</td>
</tr>
<tr>
<td>MEC</td>
<td>Medical eligibility criteria</td>
</tr>
<tr>
<td>MMR</td>
<td>Maternal mortality ratio</td>
</tr>
<tr>
<td>MVA</td>
<td>Manual vacuum aspiration</td>
</tr>
<tr>
<td>NGO</td>
<td>Nongovernmental organization</td>
</tr>
<tr>
<td>OI</td>
<td>Opportunistic infection</td>
</tr>
<tr>
<td>PAC</td>
<td>Postabortion care</td>
</tr>
<tr>
<td>PCP</td>
<td>Pneumocystis carinii pneumonia</td>
</tr>
<tr>
<td>PID</td>
<td>Pelvic inflammatory disease</td>
</tr>
<tr>
<td>POC</td>
<td>Products of conception</td>
</tr>
<tr>
<td>PVO</td>
<td>Private voluntary organization</td>
</tr>
<tr>
<td>RTI</td>
<td>Reproductive tract infection</td>
</tr>
<tr>
<td>SC</td>
<td>Sharp curettage</td>
</tr>
<tr>
<td>STI</td>
<td>Sexually transmitted infection</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>VA</td>
<td>Vacuum aspiration</td>
</tr>
<tr>
<td>VIA</td>
<td>Visual inspection with acetic acid</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
Preface

Since 1994, the United States Agency for International Development (USAID) has supported postabortion care programs in more than 40 countries. A 2001 global evaluation of its postabortion care programs led to the development of a five-year strategy in 2003. The Postabortion Care (PAC) Model was revised, a results framework with indicators was developed and the development of a Postabortion Care Global Resource Package was identified as a key activity in the strategy to respond to the need for standardized materials.

A review of existing curricula for the Global PAC Resource Package demonstrated that programs needed a global, evidence-based curriculum to adapt for use in their countries. In keeping with the goal of the USAID PAC Working Group to produce evidence-based materials for postabortion care, this curriculum has been developed and field-tested in three different country contexts. This curriculum is adapted from the Kenya 2002 PAC curriculum developed by the Ministry of Health, and incorporates the strong evidence on postabortion care, provider job aids and client information. Evidence on postabortion care, which is consolidated in a review of literature and research from 1994 to 2003 published in *What Works: A Policy and Program Guide to the Evidence on Postabortion Care* and a further review of literature and research from 2004 to 2009, is integrated throughout the curriculum. It is our hope that you will find this curriculum useful in your postabortion care educational and service delivery programs, and that countries will adapt it for pre-service, in-service and structured, competency-based, on-the-job training programs.

Other evidence-based resources for postabortion care can be found at www.postabortioncare.org. Some items include a register for PAC clients, assessment tools for use in evaluating national policies, guidelines, communication materials, provider job aids, clinic wall charts, materials for community education and mobilization, a radio spot, client brochures and educational materials. These resources are available in English, French, Spanish and Russian. All materials can be downloaded free for immediate use.

Sincerely,
Carolyn Curtis, CNM, MSN, FACNM
USAID
Team Leader—Postabortion Care
Introduction to Postabortion Care: Issues Surrounding Miscarriage, Induced Abortion and the Delivery of PAC Services

Summary
This introductory session is a brief orientation to postabortion care (PAC). It begins by describing the magnitude of maternal mortality and morbidity, factors that may cause spontaneous abortion (miscarriage), reasons why women may choose to seek abortion services and why women delay seeking PAC services. This is followed by a brief consideration of national legislation and service delivery guidelines on the provision of PAC.

Session Objectives
At the end of this session, participants will be able to:
1. Define the term “abortion”
2. Discuss the magnitude of maternal mortality worldwide as well as in their country (if known)
3. Explain possible reasons for spontaneous abortion (miscarriage)
4. Explain possible reasons why women resort to induced abortion
5. Describe the abortion laws and regulations in their country and how they impact PAC services
6. Describe policies for postabortion care at their home facilities and how they impact PAC services

Defining Terms
Throughout this document, the word abortion is used to refer to the loss or termination of pregnancy, i.e., spontaneous abortion (miscarriage) or induced abortion. The completeness of the abortion further defines the term. Also note that in this document, the terms miscarriage and spontaneous abortion are used interchangeably. When induced abortion is performed by persons without the necessary skills and/or in an environment lacking medical standards, safety is compromised and complications are more likely to result. This is sometimes referred to as “unsafe” abortion.

Magnitude of Maternal Mortality and Morbidity
Every Minute around the World
- 380 women become pregnant
- 190 women face unplanned pregnancies
- 40 women have unsafe abortions
- 1 woman dies
Each year, more than 536,000 maternal deaths occur worldwide, 99% of them in developing countries. For every maternal death, about 10–15 women suffer morbidity. At the International Conference on Population and Development (ICPD) in 1994, there was consensus that contraception should be available to prevent unplanned pregnancy.

In the years that followed the ICPD, there has been considerable commitment to addressing maternal health issues, including postabortion care. However, current maternal mortality ratios related to some regions are still alarming, as shown in Table 1.1-1. Participants can review the statistics in the table and see how they compare to their own countries.

Table 1.1-1: Estimates of Maternal Mortality Ratios

<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated MMR(^a)</th>
<th>Number of Maternal Deaths(^a)</th>
<th>Lifetime Risk of Maternal Death(^a)</th>
<th>Range of Uncertainty on MMR Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Estimate</td>
</tr>
<tr>
<td>World Total</td>
<td>260</td>
<td>358,000</td>
<td>1 in 140</td>
<td>200</td>
</tr>
<tr>
<td>Developed regions(^b)</td>
<td>14</td>
<td>1,700</td>
<td>1 in 4,300</td>
<td>13</td>
</tr>
<tr>
<td>Countries and commonwealth of independent states (CIS)(^c)</td>
<td>40</td>
<td>1,500</td>
<td>1 in 1,500</td>
<td>34</td>
</tr>
<tr>
<td>Developing regions</td>
<td>290</td>
<td>355,000</td>
<td>1 in 120</td>
<td>220</td>
</tr>
<tr>
<td>Africa</td>
<td>590</td>
<td>207,000</td>
<td>1 in 36</td>
<td>430</td>
</tr>
<tr>
<td>Northern Africa(^d)</td>
<td>92</td>
<td>3,400</td>
<td>1 in 390</td>
<td>60</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>640</td>
<td>204,000</td>
<td>1 in 31</td>
<td>470</td>
</tr>
<tr>
<td>Asia</td>
<td>190</td>
<td>139,000</td>
<td>1 in 220</td>
<td>130</td>
</tr>
<tr>
<td>Eastern Asia</td>
<td>41</td>
<td>7,800</td>
<td>1 in 1,400</td>
<td>27</td>
</tr>
<tr>
<td>South Asia</td>
<td>280</td>
<td>109,000</td>
<td>1 in 120</td>
<td>190</td>
</tr>
<tr>
<td>Southeastern Asia</td>
<td>160</td>
<td>18,000</td>
<td>1 in 260</td>
<td>110</td>
</tr>
<tr>
<td>Western Asia</td>
<td>68</td>
<td>3,300</td>
<td>1 in 460</td>
<td>45</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>85</td>
<td>9,200</td>
<td>1 in 490</td>
<td>72</td>
</tr>
<tr>
<td>Oceania</td>
<td>230</td>
<td>550</td>
<td>1 in 110</td>
<td>100</td>
</tr>
</tbody>
</table>


\(^a\) The MMR and lifetime risk have been rounded according to the following scheme: <100, no rounding; 100–999, rounded to nearest 10; and >1,000, rounded to nearest 100. The numbers of maternal deaths have been rounded as follows: <1,000, rounded to nearest 10; 1,000–9,999, rounded to nearest 100; and >10,000, rounded to nearest 1,000.

\(^b\) Includes Albania, Australia, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Serbia and Montenegro (Serbia and Montenegro became separate, independent entities in 2006), Slovakia, Slovenia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia, the United Kingdom and the United States of America.

\(^c\) The CIS countries are Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, the Republic of Moldova, the Russian Federation and Ukraine.

\(^d\) Excludes Sudan, which is included in sub-Saharan Africa.
Maternal Mortality and Morbidity: The Impact of Spontaneous and Induced Abortion

Worldwide, an estimated 20 million unsafe abortions take place each year, contributing to about 68,000 deaths or approximately 13% of all maternal deaths. Almost 50% of all deaths occur in adolescents and young women under the age of 25 because they are more biologically vulnerable and have fewer resources to access needed care. Between 10–50% of those experiencing unsafe abortions will need medical care for complications.

Table 1.1-2: Estimated Number of Deaths Due to Unsafe Abortion by Age, 2003

<table>
<thead>
<tr>
<th>Age Group (years)</th>
<th>All Ages</th>
<th>&lt;20</th>
<th>20–24</th>
<th>25–29</th>
<th>30–34</th>
<th>35–39</th>
<th>&gt;39</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing regions</td>
<td>66,500 (100%)</td>
<td>11,800 (18%)</td>
<td>18,500 (28%)</td>
<td>15,600 (23%)</td>
<td>11,000 (17%)</td>
<td>6,700 (10%)</td>
<td>2,900 (4%)</td>
</tr>
<tr>
<td>Africa</td>
<td>35,900</td>
<td>9,000</td>
<td>11,500</td>
<td>7,200</td>
<td>4,500</td>
<td>2,800</td>
<td>900</td>
</tr>
<tr>
<td>Asia, excluding Eastern Asia</td>
<td>28,500</td>
<td>2,400</td>
<td>6,400</td>
<td>7,800</td>
<td>6,300</td>
<td>3,700</td>
<td>1,900</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>2,000</td>
<td>300</td>
<td>600</td>
<td>500</td>
<td>300</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>Oceania</td>
<td>60</td>
<td>5</td>
<td>10</td>
<td>20</td>
<td>10</td>
<td>10</td>
<td>4</td>
</tr>
</tbody>
</table>


About 15–20% of all pregnancies will end in spontaneous abortion or miscarriage. Some of these women will also suffer complications such as retained products of conception and will need emergency treatment.

In addition to medical emergencies, many women will suffer long-term health problems, including chronic pelvic pain and pelvic inflammatory disease, tubal blockage and secondary infertility. There is also an increased risk for other problems including:

- Ectopic pregnancy
- Spontaneous abortions and premature delivery in subsequent pregnancies
- Psychological trauma
- Maternal death
- If the mother dies, children left behind are up to 10 times more likely to die

Postabortion care is internationally recognized as an important intervention to address these and other complications related to miscarriage and induced abortion. PAC should therefore be an integral part of all essential obstetric and newborn care programs.
In many instances, Safe Motherhood programs do include PAC as a part of basic and comprehensive emergency obstetric care (EmOC). With a focus on maternal mortality reduction, these programs often target interventions to help prevent, recognize and/or treat the most common obstetric complications. Services such as family planning may unfortunately be omitted, therefore limiting postabortion care to emergency treatment only (usually uterine evacuation).

The unmet need for family planning is one of the root causes for induced abortion. To address unmet need and reduce the incidence of repeat, unplanned pregnancy that often results in repeat abortion, family planning is an integral part of postabortion care in all PAC models. As you will see in the modules that follow, this includes both counseling and provision of family planning methods. Ideally, these services are provided in the same place as emergency treatment. Introducing this model into EmOC programs would help women determine healthy timing and spacing of future pregnancies, meet the demands of the unmet need for family planning and facilitate the prevention of unplanned pregnancy and repeat abortion. With this model, PAC can have a significant impact on maternal mortality and the unmet need for family planning, as well as assist countries in meeting Millennium Development Goal (MDG)-5 and United Nations General Assembly goals.

Spontaneous Loss of Pregnancy

The World Health Organization defines spontaneous abortion (miscarriage) as the spontaneous loss of a clinical pregnancy before 20 completed weeks of gestation or, if gestational age is unknown, a weight of 500 g or less (WHO 2002). It is estimated that, worldwide, up to 32 million pregnancies each year will end in spontaneous abortion, compared to approximately 20 million induced abortions during the same time period.

Most miscarriages occur between the sixth and twelfth weeks of pregnancy. This can result in complete or incomplete expulsion of the products of conception. Postabortion care for these women may also require additional counseling and support as women grieve the loss of a pregnancy and/or experience anxiety concerning future fertility.

In many women, the exact cause of spontaneous abortion may not be clear, even after a thorough history and physical examination. However, women with recurrent miscarriage should be referred for further evaluation. Some of the known factors that contribute to miscarriage or spontaneous abortion include:

- Genetic factors account for approximately 5% of spontaneous abortions
- Hormonal factors:
  - Hypothyroidism
  - Poor diabetic control
  - Polycystic ovarian syndrome
- Infections:
  - Bacterial, viral, parasitic and fungal infections
Malaria—there is a strong association between malaria in pregnancy and an increased risk of spontaneous abortion

HIV—associated with a significantly higher rate of miscarriage compared to HIV-negative women

Sexually transmitted infections—prompt treatment of STIs during pregnancy can reduce the risk of spontaneous abortion

Gender violence

Physical violence during pregnancy, which has been linked with higher rates of spontaneous abortion

Other contributing factors:
- Environment
- Smoking
- Drugs
- Placental abnormalities
- Medical illnesses

Induced Abortion

Why Women Resort to Abortion

There are multiple reasons why women resort to abortion when faced with an unplanned pregnancy. Some may have become pregnant because of a lack of power to negotiate sexual activity and/or the use of contraception. The social and cultural environment in which a woman lives, the dominant religion and her own personal beliefs also contribute to the decisions she makes about unintended pregnancy and the services she seeks.

In addition, providers may indirectly influence where women seek care. For example, the socio-cultural perspectives and religious beliefs of health workers affect their attitudes toward women seeking abortion services. If these attitudes are negative, women may be reluctant to access care in a timely manner.

It is important to remember that every woman’s situation is different and the factors that led to her decision vary widely. Knowing the reason for her decision can assist in individualizing counseling, care and referral. Possible reasons why women seek abortion are listed below.

- Economic problems such as:
  - Inadequate income to care for the baby
  - Lack of employment
- Social and cultural problems such as:
  - A pregnancy out of wedlock
■ Being forced or pressured to have an abortion
■ Cultural and religious stigma
■ Preference for a male child (if fetus is a female)

■ Medical problems such as:
  ■ Knowledge that the child will be born with serious health problems
  ■ History of obstetric complications
  ■ History of medical problems during pregnancy
  ■ HIV status

■ Unintended pregnancy due to:
  ■ Lack of access to family planning services
  ■ Contraceptive method failure
  ■ Rape or incest

■ Other reasons such as:
  ■ Desire to space or limit pregnancies
  ■ Desire to delay pregnancy for personal reasons or circumstances
  ■ School enrollment status

Factors That Affect Whether Women Seek Postabortion Care
There are several socio-cultural elements that can influence whether a woman seeks postabortion care services. Many of these are interrelated and affect the woman’s ability to make informed decisions concerning her care:

■ Women’s ability and willingness to seek care promptly:
  ■ Women may need permission from their husbands or parents/guardians (and financial support) to seek and use health services. For many women, use of postabortion care services can lead to social ostracism or even rejection by family members. To avoid such rejection, women will often delay seeking care, even to the point of death.

■ Access to postabortion care services:
  ■ Because of the personal nature regarding postabortion care services, women may be reluctant to choose facilities where friends or neighbors may recognize them. Also, accessibility of health services in their area may be limited.

■ Importance of fertility:
  ■ In many societies, a woman’s fertility is central to her acceptance by the community. She may be unwilling to use modern contraception because she perceives it as harmful to her fertility. In some cases, women who experience spontaneous abortion may be blamed for the miscarriage, creating another negative influence on her decision to seek care.
■ Providers’ attitudes toward postabortion care needs of women and youth:
  ■ Studies have documented that provider attitudes toward PAC clients have an impact on client
decisions to seek care. Providing empathy and support improves the quality of PAC care.

Health care providers should not exhibit judgmental, harsh or unprofessional behavior. Rather, it is
important that they provide care that is gentle and supportive, encouraging the woman/youth to
seek, rather than hide from, medical help. It is particularly important that clinic and hospital staff are
aware of and sympathetic to women from diverse age groups, marital status and cultural groups who
are cared for at the same facility.

**Delays in Seeking Care**
Factors affecting why women seek care are also related to preventable delays. These include delays in:

■ Recognizing that a problem exists:
  ■ Many feel that certain problems are “normal” in pregnancy, e.g., bleeding in
  pregnancy, etc.
  ■ Some women may not know they are pregnant (especially adolescents or women pregnant
  for the first time) so are unaware that the problem is pregnancy-related.

■ Deciding to seek care:
  ■ Gender/family roles may dictate who decides when a woman seeks care.
  ■ Women who have received poor quality care in the past may be reluctant to seek care.
  ■ Women suffering from abortion-related complications may fear reprisals or negative attitudes
  from family, friends and the community.
  ■ The cost of services may deter youth and women from seeking services.

■ Reaching care:
  ■ Women in rural populations may have little access to transportation, and roads may be poor,
especially during rainy seasons.
  ■ Women may not have the funds to access transportation.

■ Receiving care once they arrive at the facility:
  ■ Many facilities do not offer all components of PAC.
  ■ Lack of a triage system may aggravate delays in treating priority clients.
  ■ Under-staffed and poorly equipped sites may result in treatment delays.
  ■ Service providers may have negative and punitive attitudes toward postabortion clients,
  particularly youth or unmarried women, which may lead to more delay in providing
  services.
Understanding Your Country’s Policies Regarding the Provision of PAC Services

Every country has laws, policies and/or regulations on induced abortion and postabortion care. It is very important to practice within those regulations or guidelines. However, these laws may not always be clear to providers and clients, and may result in barriers to accessing or providing quality postabortion services.

Postabortion care is a lifesaving intervention that should be available to all women. Women have a distinct role in reproductive health and are uniquely affected by government policies. Every woman has the right to the highest quality postabortion care possible, whether the abortion was spontaneous or induced.

The medical profession has the ethical responsibility to provide postabortion services, including family planning/birth spacing counseling and services, to all women who need them, as this care is often essential to saving a woman’s life and reducing repeat unplanned pregnancy and repeat abortion. However, when the laws and regulations regarding postabortion are not clear, these services are often not put in place.

Policies, norms and protocols on postabortion care can also affect who provides the services and how these providers are trained. This includes training not only in emergency obstetric procedures but also family planning counseling and service provision. It is vital that providers receive quality training in PAC and related services, including regular updates as needed and appropriate.

Sometimes people are confused about the legal status of induced abortion and policies on postabortion care. In countries where abortion is illegal, many are unaware that emergency postabortion care is a medical requirement in nearly every instance, regardless of the cause of the abortion. However, women in need of PAC services may be reluctant to seek care, even for spontaneous abortions, if they fear the consequences of their actions. Fear may also affect service providers. Concern about criminal prosecution, for instance, can result in mistreatment of PAC clients if they are regarded as criminals. Providers may also face stigma if their work is perceived as controversial. Provision of postabortion care should not lead to punishment of the provider, but can easily happen if PAC policies are not understood and supported.

Regulating bodies should promote understanding of laws and policies affecting postabortion care among both providers and the general public. It is also important to involve community leaders in creating awareness and other strategies to educate the public.

Think about your facility and/or community and what local laws and policies affect or can affect PAC. If your country’s policies are not available, use any of the following examples from the Postabortion Care Global Resources Package. These can be found at the following Web site: http://www.infoforhealth.org/pac/policies/policies4.shtml.
Examples of PAC Policies and Guidelines

- **Uganda:**
  - National Adolescent Health Policy, 2000

- **Malawi:**
  - Ministry of Health and Population Reproductive Health Unit, National Postabortion Care Strategy, January 2004

- **Bolivia:**
  - Supreme Decree #25265—basic health care that promotes preventive and curative services to reduce maternal and infant morbidity and mortality
  - Ministerial Resolution #0133—sets the scope of the government’s obligation to protect the health and well-being of the Bolivian population
  - Law #1788, Article 11 of the Bolivia Health Code—refers to the norms, supervision and evaluation of the national health care system for improving the quality of services consistent with the Strategic Health Plan
  - Supreme Decree #26874—describes universal maternal and infant health insurances scheme
  - Law #2426—planning, acquisition and maintenance of MVA equipment in sufficient quantities for clients who present for treatment of hemorrhage during the first half of pregnancy

- **Philippines:**
  - Department of Health, Office of the Secretary, Administrative Order #45-B, Prevention and Management of Abortion and Its Complications (PMAC) Policy—includes scope of PAC services, general guidelines, PAC procedures and responsibilities at each level of the health care system, and a general statement on quality assurance

- **Nepal:**
  - National Medical Standards include postabortion care


11 Hakimi, M. et al. 2001. *Silence for the Sake of Harmony: Domestic Violence and Health in Central Java, Indonesia*. CHN-RL, GMU, Yogyakarta; Rifka Annisa Women’s Crisis Center, Yogyakarta; Umea University, Sweden; and PATH: Indonesia, Sweden and USA.


Postabortion Care: The PAC Model

Summary
Postabortion care (PAC) is a package of services provided to women who have had a miscarriage or an induced abortion. PAC comprises three core components that should be implemented in a systematic way. This session defines PAC, explains the rationale for carrying out postabortion care programs, introduces the core components of the Postabortion Care Model and introduces the benefits of postabortion family planning (FP) counseling and services.

Session Objectives
At the end of this session, participants will be able to:
1. Define postabortion care
2. Explain why counseling should be integrated throughout all components of PAC
3. Outline the three components of the PAC Model and the main elements of each
4. Define the difference between emergency obstetrical care and postabortion care
5. State three benefits of providing postabortion care services

Postabortion Care
Postabortion care has been widely embraced as an important intervention to address complications related to spontaneous and induced abortion through improving treatment and linking women to family planning and other reproductive health services. PAC, as a part of a larger reproductive health strategy, can be vital in reducing the unmet need for FP, which can prevent future unplanned/mistimed pregnancies, decrease the incidence of repeat abortion and miscarriage, and decrease maternal morbidity and mortality.

Definition of Postabortion Care
Postabortion care is a package of services provided to women who have had a miscarriage or an induced abortion. PAC comprises three core components, which should be implemented in a systematic way.

The three core components of the PAC Model are:
1. Emergency treatment for complications of spontaneous or induced abortion
2. Family planning counseling and service provision, and where there is prevalence and resources are available, STI evaluation and treatment and HIV counseling and/or referral for testing
3. Community empowerment via community awareness and mobilization
Benefits of Providing Postabortion Care

PAC has been shown to benefit clients and programs in the following ways:

- PAC contributes to a higher contraceptive acceptance rate:
  - When postabortion family planning counseling and services are available at the same time and in the same site as emergency treatment, women are more likely to use contraceptives.¹
  - Family planning counseling can increase the proportion of women who agree to use a family planning method before leaving the PAC facility.²

- PAC increases access to family planning information and informed method choice:
  - Improving FP counseling and clinical skills can increase the proportion of women being discharged with a contraceptive method³ and an expanded method mix.

- PAC brings cost savings to facilities and clients:
  - Using vacuum aspiration (VA) instead of dilatation and curettage (D&C) for PAC can result in cost savings to the facility (fewer personnel, lab, drug and anesthesia costs) and to the client (less expensive medication, reduced hospital stay).

- PAC reduces repeat abortion:
  - High-quality FP services can reduce the number of unplanned pregnancies and can result in a reduction in the number of repeat abortions.⁴

**Figure 1.2-1: USAID’s Core Components of the PAC Model**

Components of the PAC Model

**Integrating Counseling**

Postabortion care services should include both medical and preventive health care. While settings may differ and not all may be able to provide all components of PAC, every provider can offer counseling and preventive measures. Counseling is not a separate component in this model but is integral to all
components of PAC. Specific counseling topics are outlined for each of the three key components of postabortion care in the appropriate module. However, providers should take advantage of every appropriate opportunity for initiating the various counseling subjects, regardless of when it occurs. In addition to giving information, providers should offer emotional support throughout the visit. Always encourage the client to ask questions or express any concerns she may have.

Component 1: Emergency Treatment
This first component outlines a guideline for triage and emergency treatment based on the level of the health care facility and available staff. It involves the prompt treatment of abortion complications, which may include retained products of conception (resulting in hemorrhage and/or infection), injury to internal organs and other related problems such as shock. The aspects of emergency treatment provided also depend on the woman’s condition, but often include stabilization, uterine evacuation and management of pain, bleeding and infection.

Postabortion Care Is More than Emergency Obstetrical Services
It is important to note that postabortion care is different from emergency obstetrical care. Postabortion care is the integration of family planning services at the time that emergency treatment is given. If family planning counseling and services are not included at the time of emergency treatment, then only emergency obstetric services have been provided. Attention to FP counseling should be initiated as soon as possible, thus enabling the integration of Component Two.

Postabortion Care vs. Emergency Obstetrical Care

Component 2: Family Planning Counseling and Provision, and where there is disease prevalence and resources are available, STI Evaluation and Treatment, and HIV Counseling and/or Referral for HIV Testing
The second component is at the core of postabortion care. While timely emergency treatment is vital to the reduction of maternal mortality, postabortion family planning is the prevention part of postabortion care services that is critical for the reduction of future mistimed pregnancies and repeat abortions. Postabortion family planning can assist in addressing the unmet need for family planning, which is often a root cause for induced abortion.

Recent studies indicate an increase in postabortion family planning usage when services are provided in the same place as emergency treatment and when couples are counseled together regarding family planning options. When family planning services are not available, linkages with referral sites that
offer family planning follow-up are critical. Appropriate counseling can and should be provided for every client regardless of the type of treatment and even when the full range of FP services is not offered. If long-acting or permanent methods are desired, but not available at the site where emergency treatment is provided, another method should be offered and referral made for long-acting or permanent methods. If women are uncertain about what method to use, condoms and spermicidal creams/jellies should be offered and provided as a short-term method for pregnancy prevention, as well as dual protection. Women who have miscarried or have undergone an induced abortion should be counseled to wait at least six months before becoming pregnant again to increase the chances of a healthier next pregnancy by decreasing the incidence of low birth weight, maternal anemia and preterm delivery.

A client who has had an unplanned/mistimed pregnancy may have been exposed to STIs. Untreated reproductive infections may lead to spontaneous abortion, PID and other problems such as infertility. Clients who are HIV-positive will need specialized care, counseling and support. Countries with high incidences of STI and HIV should therefore consider including STI counseling, evaluation and treatment, and voluntary HIV counseling and/or referral for testing as an integral part of postabortion care, dependent upon their human resources.

For many women, PAC may be the only recent contact they have had with the health care system. It therefore may be a critical time to initiate referral to the appropriate selected services.

Component 3: Community Empowerment through Community Awareness and Mobilization

Effective community awareness and mobilization are needed to empower the community to provide and demand high-quality, effective postabortion services. Here, the term community includes governments, ministries of health and education, private voluntary organizations (PVOs), NGOs, women’s groups, professional organizations, community associations, male leadership, faith-based organizations (FBOs), traditional providers, community-based distributors, donors and other stakeholders appropriate to each setting. The community should:

- Identify its health needs as they relate to postabortion care;
- Plan for resources necessary to meet identified health needs;
- Work with stakeholders to mobilize resources to provide PAC;
- Determine how to make care accessible in the community;
- Educate fellow community members about consequences of bleeding in the first half of pregnancy, induced abortion and the delays in seeking care; and
- Establish relationships with health care providers/facilities on all levels to ensure comprehensive service delivery for postabortion care.

PAC community mobilization using the community action cycle has been implemented in Bolivia, Peru, Egypt, Senegal and Kenya, and has resulted in increased family planning uptake not only for PAC clients but also for the community at large.
The following table outlines the three core components and summarizes the details of each.

**Table 1.2-1: Core Components 1, 2 and 3: Emergency Treatment—Provision of Care by Level of Health Care Facility and Staff (adapted from WHO 1995)**

<table>
<thead>
<tr>
<th>Core Component 1: Emergency Treatment</th>
<th>Level</th>
<th>Staff May Include</th>
<th>Emergency PAC Provided</th>
<th>Postabortion FP (Component 2)</th>
</tr>
</thead>
</table>
| **Community**                         | Community residents with basic health training, traditional birth attendants, traditional healers | 1. Recognition of signs and symptoms of abortion and postabortion complications  
2. Referral to facilities where treatment is available | 1. Provision of pills, condoms, diaphragms and spermicides, and in some countries injectable contraceptives  
2. Referral and follow-up for these and other methods |
| **Primary**                           | Health workers, nurses, trained midwives, general practitioners | All Primary Facilities: Above Activities Plus  
3. Diagnosis based on medical history; physical examination and pelvic examination  
4. Resuscitation/preparation for treatment or transfer  
5. Tetanus vaccination  
6. Referral, if needed | Provision of Above Plus  
3. IUDs, injectable contraceptives, implants and Standard Days Method®  
4. Referral for voluntary sterilization |
| If Trained Staff and Appropriate Equipment Available: Above Activities Plus | 7. Counseling regarding treatments/emotional support  
8. Hematocrit/hemoglobin testing  
9. STI evaluation and treatment  
10. Initiation of emergency treatments:  
    • Antibiotic therapy  
    • Intravenous fluid replacement  
    • Oxytocics  
11. Uterine evacuation during first trimester for uncomplicated cases  
12. Appropriate pain control:  
    • Simple analgesia and sedation  
    • Local anesthesia (paracervical block) | 5. Family planning follow-up and referral to primary and community levels for long-term FP follow-up  
6. HIV counseling  
7. Follow-up appointment or referral for HIV counseling and testing (as program dictates)  
8. Referral to primary/secondary/tertiary sites as appropriate for gender-based violence, psychological/emotional needs; HIV counseling and testing |
<table>
<thead>
<tr>
<th>Level</th>
<th>Staff May Include</th>
<th>Emergency PAC Provided</th>
<th>Postabortion FP</th>
</tr>
</thead>
<tbody>
<tr>
<td>(District hospital)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary and Tertiary Levels</td>
<td>Nurses, trained midwives, general practitioners, obstetrician/gynecologists, specialists</td>
<td><strong>Above Activities Plus</strong>&lt;br&gt;10. Uterine evacuation as indicated for all cases&lt;br&gt;19. Treatment of severe complications (including bowel injury, severe sepsis, renal failure)&lt;br&gt;20. Treatment of bleeding/clotting disorders</td>
<td>All Above Activities</td>
</tr>
<tr>
<td>(Regional or referral hospital)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Core Component 2: See Component 1 for Level of Health Facility and Staff**

Family Planning Counseling and Provision; STI Evaluation and Treatment; and HIV Counseling and/or Referral for HIV Testing (HIV counseling and testing in countries with high HIV prevalence)

1. Counseling regarding the return of ovulation within two weeks after emergency treatment
2. Counseling regarding self-care at home, including any emotional sequelae
3. Counseling regarding the ability to carry a future pregnancy as desired but to wait six months before attempting the next pregnancy to assist in optimal outcomes for the next pregnancy
4. Counseling regarding behaviors that put one at risk for HIV/STI transmission
5. Counseling regarding contraceptive methods that can be used (oral contraceptives, diaphragms, condom, implants, Depo-Provera, Standard Days Method, spermicides, IUDs, voluntary sterilization)
6. Provision of oral contraceptives, condoms, diaphragms, spermicides, IUDs, implants, Depo-Provera, voluntary sterilization and instruction regarding the Standard Days Method
7. Listing and evidence of linkages to community/primary/secondary/tertiary referral sites for contraceptive methods not available at treating facility
8. Evidence of linkages and referral mechanisms to/from community, primary, secondary and tertiary facilities for the provision of the following services:
   - Pre-pregnancy family planning counseling and provision
   - Initial emergency treatment
   - Postabortion family planning (initiation of method and appointment and/or referral for long-term FP follow-up, incorporating all methods, including Standard Days Method and lactational amenorrhea method, enabling women to continue FP services in their communities)
   - STI evaluation and treatment
   - HIV counseling and voluntary counseling and testing

9. Referrals to community/primary/secondary/tertiary sites for family planning follow-up; HIV/STI counseling/screening/treatment follow-up; counseling for emotional/psychological needs; counseling for gender-based violence

---

### Core Component 3:
Community Empowerment through Community Awareness and Mobilization

1. Educate community about consequences of bleeding in the first half of pregnancy, unsafe abortion and delays in seeking care
2. Educate community regarding three delays and their effect on maternal mortality
3. Provide each community with evidence of listings and/or linkages between community and community/primary/secondary/tertiary resources that can provide:
   - Family planning counseling and services
   - Counseling regarding three delays and their effect on maternal mortality/morbidity
   - Emergency treatment
   - HIV voluntary counseling and testing and HIV treatment
   - STI counseling, testing and treatment
4. Have communities make decisions about type and number of PAC facilities for their community
5. Have communities make decisions regarding transporting of women for emergency treatment
6. Have community generate resources for PAC services (facility, funds for payment of services, transportation, equipment)


*Note:* Community includes local, district and national governments; ministries of health and education; NGOs; PVOs; women’s groups; professional organizations; youth groups; FBOs; traditional birth attendants; traditional healers; male leadership; community-based distributors; and other stakeholders appropriate to each specific community.

2 Ibid.

3 Ibid.


Postabortion Care: Values and Attitudes

Summary
This session will introduce values and attitudes and their importance in postabortion care. Many providers are from similar backgrounds, but may have very different experiences leading to different conclusions during daily work interactions or when discussing a common issue. Awareness of their own values and attitudes helps health care professionals to provide care in a respectful and non-judgmental manner regardless of clients’ values, social status or personal condition.

Acknowledgments: Information from EngenderHealth, Postabortion Counseling Curriculum and JHU/CCP video, Put Yourself in Her Shoes, has been adapted for use in this session.¹

Session Objectives
At the end of this session, participants will be able to:

1. Define the terms values and attitudes
2. Explain the importance of being aware of our own values and attitudes
3. Explain the importance of respect for all clients, regardless of their values, social status or personal situation, and demonstrate this in an actual counseling session or classroom activity

Values and Attitudes in Postabortion Care
A value is a belief that is important to an individual. Values can be influenced by religion, education, culture and personal experiences. Our values shape our attitudes, or the way that we think about and act toward particular people or ideas.

Every interaction between a client and health care staff, from the time she enters the health care system until she is discharged, affects the woman’s satisfaction with her care, how quickly she recovers and how well she takes care of herself after she leaves the facility.

How we communicate our own values and attitudes (both verbally and nonverbally) is an important part of our interactions with the women we treat. Our values are often so ingrained that we are unaware of them until we are confronted with a situation that challenges them.

Our attitudes, feelings, biases and values will affect how we treat a client’s illness. For example, our private reaction to the client’s looks, social class, age and marital status affects the gentleness or harshness with which we perform procedures, the delay that we may impose on clients and whether we consider the full range of health care needs of each client.

Being aware of our own attitudes helps ensure that we don’t impose our beliefs on our clients. It is not always easy to keep our personal values and attitudes separate from our professional responsibilities, but it is our duty to do so.
Keep in mind that even two people from similar experiences and backgrounds may see things differently. What do you see in the following image, a lady or a musician?

**Provider Response**

- Effective communication between client and provider is built on the provider’s ability to understand the feelings and experiences of the client. When a woman enters a clinic for treatment of incomplete abortion, her circumstances are often much more complicated than when she enters for other reasons. Consider the following examples when caring for a PAC client:
  - It is possible that the woman may be having a miscarriage due to physical violence or malaria.
  - It is possible that the woman may have been a victim of physical violence at some time in her life. Between 27% and 39% of women seeking abortion have been abused at some time during their lives.
  - The woman may have been forced to have an abortion and may later experience guilt and regret.²

Clients respond much more favorably to a provider who expresses genuine interest and concern. Technical expertise is often not the determining factor when clients are rating their quality of care. Health care workers do not have an obligation to change or fix the feelings of a client, but it is often helpful to let her know that we understand her feelings.

It is normal for providers to experience emotions in the potential life-and-death encounters of clinical emergencies. All providers should therefore be aware of their emotional responses to clients and specific thoughts and actions that can convey empathy and encourage two-way communication.

**Emotional Response of PAC Clients**

Women seeking postabortion care may experience a range of emotions. Many factors may influence a woman’s emotional state: her feelings about her pregnancy loss or abortion, concern over her medical condition, beliefs about the medical treatment, lack of familiarity with the hospital setting and the amount of time she has waited for treatment.

Studies have found that grief after a miscarriage is quite common. For example, women who have experienced miscarriage may feel depression or anxiety. They may perceive themselves as being a “failure” for not carrying the baby to term or be anxious about future pregnancies.³⁴ Some women may worry about how their in-laws or other relatives will perceive their pregnancy loss.⁵⁶ Further counseling and support may be needed for women who have had a miscarriage.

Some women presenting for postabortion care may have been compelled to have an abortion and may experience medium- or long-term regret, guilt and/or anxiety.⁷⁸ PAC providers should be aware that a minority of women may experience feelings of sadness, guilt, regret and depression in the months after the event.⁹
Acknowledging the client’s fears and concerns, responding empathetically and trying to allay her fears are all a vital part of the PAC provider’s role. With the client’s permission, involving her partner and/or other family or loved ones is one way to encourage family support for the woman.

Sometimes a client will not tell a health worker how she feels. In this case, do not judge her, but ask about her feelings. Her answer could be, “I feel horrible,” or “I want to leave here.” We may feel inclined to respond with phrases such as, “You will feel better soon,” or “Your situation is not that bad.” However, these responses do not acknowledge the client’s feelings, but indicate that we are trying to make her feelings disappear or to fix them for her. A better response is one that recognizes her feelings and motivates her to share more about how she feels. For example, “I think many women feel the same way in this situation,” “We understand” or “We’re here to help you.” Help the client feel more comfortable by using phrases such as, “Tell me, what is your biggest worry?” or “What can I do to help you?” Sympathy and empathy are two ways that one can show feelings.

Empathy is not just feeling sorry for someone. It means understanding how the other person feels. Empathy means to show understanding, concern and a desire to help in a way that encourages open, honest communication.

No matter what circumstances led a client to seek postabortion care, the provider must give professional, respectful care without an attitude of judgment or punishment. PAC training can reduce punitive attitudes toward PAC clients as providers gain information and skills about postabortion client needs.

**Empathy:** The power of understanding and using your imagination to enter into another person’s feelings. Being empathetic means understanding a person’s feelings without becoming emotionally involved or, in other words, “putting yourself in her shoes.”

**Sympathy:** The showing of compassion or sharing of another’s emotions, especially of sorrow or anguish. Sympathy can be shown by expressing sorrow or compassion in culturally appropriate ways. Appropriately consoling or reassuring the client can also be expressions of sympathy.

**A Word about Working with Adolescents/Youth**

All adolescents/youth who present for postabortion care services will not be the same. Some reasons are that they:

- Are at different stages of physical and psychosocial development
- Can be married or unmarried
- May be HIV-positive or HIV-negative
- Can be orphans or vulnerable children
- May present late for PAC services with more severe symptoms due to:
  - Lack of transportation
- Lack of money to pay for services
- Fear of medical procedures
- Lack of family support
- Fear of provider attitude and reactions

Some things you can do to help adolescents/youth during a PAC visit:

- Use a smaller speculum for examination.
- Allow extra time for counseling and special care as teens may not discuss their real problem or concerns at the beginning of the visit.
- Tailor your counseling to the specific needs and characteristics of each young person—speak in language that they can understand.


PAC Core Component One—Emergency Treatment: Preparation and Client Assessment

Summary
Preparation for providing health care starts long before the client arrives. First, health services must be organized to ensure the highest quality of care. This includes not only restructuring the environment, but ensuring that providers are trained in all PAC components and that contraceptive methods are available at the site of services. With a supportive policy environment for PAC, a reorganization of services can improve provider attitudes and skills, and improve access to contraceptive methods and services. Then, when the woman presents for care, the provider assesses her clinical condition in an environment that increases quality of care and client satisfaction. A thorough assessment is the first step in providing the most appropriate care and treatment.

The next two modules present details of the core components of postabortion care. This session is an introduction to the emergency treatment component. There is a brief discussion about rearranging patient service areas, with a focus on client privacy, followed by guidance on gathering information from the history and physical examination.

Session Objectives
At the end of this session, participants will be able to:

1. Describe emergency treatment
2. Describe how to rearrange patient service areas to ensure confidentiality, privacy and the ability to counsel a male partner or other companion with the client
3. Perform client assessment and examination according to standards, including:
   a. A rapid assessment to rule out life-threatening conditions, including immediate management as needed
   b. A complete history
   c. A physical examination including:
      - Abdominal examination
      - Assessment of uterine size and position by bimanual examination
      - Assessment of the cervix to determine the degree of cervical dilatation

Integrating Counseling

Before emergency treatment:
- Assess the client’s capacity to receive information
- Explore the client’s needs and feelings
- Examine the client’s values and reproductive plans
- Based on the client’s condition, provide information about the following as appropriate:
  - Exams and findings
  - Treatment/procedures/pain management
  - Possible side effects, complications and risks
  - Human reproductive processes
  - Available FP methods

- Speculum examination
- Determining and obtaining the appropriate laboratory tests needed

4. Explain the different types of miscarriage and abortion, including major signs and symptoms

5. Demonstrate during practice sessions the ability to integrate appropriate counseling in emergency treatment as indicated

**Emergency Treatment**

Emergency treatment is the prompt management of potentially life-threatening abortion complications including hemorrhage and/or infection from retained products of conception (POC), injury to internal organs and other related problems such as shock. Components of emergency treatment include client assessment, uterine evacuation and other related treatment such as antibiotic therapy. All treatment should also include standard infection prevention precautions, informed consent, appropriate pain management and relevant counseling.

The term “emergency treatment” may imply that all postabortion situations are of an urgent nature. Postabortion care services, however, do not always involve complications, are not always life-threatening and treatment is therefore not always needed on an emergency basis. However, timely evaluation, treatment and referral are needed when incomplete abortion is suspected because delays in care could result in eventual complications.

It is important to remember that emergency treatment alone does not represent PAC. Postabortion care is incomplete without appropriate family planning counseling and services.

**Emergency Treatment Has Several Main Aspects**

■ Complete client assessment including:

■ Rapid assessment:
  - Evaluation for shock or other life-threatening conditions
  - Resuscitation/stabilization
  - Preparation for treatment or transfer

■ Continuing assessment and diagnosis:
  - Recognition of signs and symptoms of abortion
  - Recognition of signs and symptoms of postabortion complications

■ Preparation for treatment and care as needed:
  - Pain management (before, during and after procedure)
  - Uterine evacuation and related treatment (if needed)
  - Treatment for complications
  - Counseling (integrated throughout all components of care)
If shock is suspected, begin treatment IMMEDIATELY.

Keep in mind that shock can develop at any time, so careful monitoring throughout postabortion care is important.

Module 2, Session 6 outlines the detailed assessment and treatment for shock and other emergency conditions.
- Pallor, cyanosis

- Make initial assessment of vaginal bleeding:
  - Amount of bleeding
  - Presence of clots or POC
  - Pallor
  - Presence or history of blood-soaked clothing, pads or bedding

- Assess for intra-abdominal injury

- Assess for sepsis

Some of these steps can be done simultaneously. For example, while obtaining a history of the presenting problem, you can assess color and level of consciousness. Once shock is ruled out, proceed to assess quickly for other serious complications listed above. Below is a summary of the major elements of rapid initial assessment.

## Rapid Initial Assessment

When a woman of childbearing age presents with a problem, rapidly assess her condition to determine what care she needs.

### Table 2.1-1: Rapid Initial Assessment

<table>
<thead>
<tr>
<th>Assess</th>
<th>Danger Signs</th>
<th>Consider</th>
</tr>
</thead>
</table>
| **Airway and breathing**     | **LOOK FOR:**
|                              | - Cyanosis                                                                   | - Severe anemia                 |
|                              | - Respiratory distress                                                      | - Heart failure                 |
|                              | **EXAMINE:**
|                              | - Skin: pallor                                                               | - Pneumonia                     |
|                              | - Lungs: wheezing or rales                                                  | - Asthma                        |
| **Circulation**              | **EXAMINE:**
| (signs of shock)            | - Skin: cool and clammy or sweatiness                                       | - Shock                         |
|                              | - Pulse: fast (110 or more) and weak                                        |                                  |
|                              | - Blood pressure: low (systolic less than 90 mm Hg)                         |                                  |
|                              | - Pallor                                                                    |                                  |
|                              | - Rapid breathing (30 breaths/minute or more)                               |                                  |
|                              | - Anxiousness, confusion, unconsciousness                                    |                                  |
|                              | - Scanty urine output (less than 30 ml per hour)                             |                                  |
| **Vaginal bleeding**         | **ASK IF:**
| (early pregnancy)           | - Pregnant/length of gestation                                              | - Abortion                      |
|                              | **EXAMINE:**
|                              | - Vulva: amount of bleeding, obvious tears, protruding POC                  | - Ectopic pregnancy             |
|                              | - Proceed with gentle speculum and bimanual exam if history and exam indicate possible abortion | - Molar pregnancy               |
### Assess

#### Danger Signs

<table>
<thead>
<tr>
<th>Assess</th>
<th>EXAMINE:</th>
<th>Consider</th>
</tr>
</thead>
</table>
| Unconscious or convulsing       | ASK IF:  
  - Pregnant, length of gestation |  
  EXAMINE:  
  - Blood pressure: high (diastolic 90 mm Hg or more)  
  - Temperature: 38°C or more |  
  - Eclampsia  
  - Malaria  
  - Epilepsy  
  - Tetanus |
| Dangerous fever                 | ASK IF:  
  - Weak, lethargic  
  - Frequent, painful urination |  
  EXAMINE:  
  - Temperature 38°C or more  
  - Unconscious  
  - Neck stiffness  
  - Lungs, shallow breathing, consolidation  
  - Abdomen, severe tenderness  
  - Vulva, purulent discharge  
  - Breasts, tender |  
  - Urinary tract infection  
  - Malaria  
  - Metritis  
  - Pelvic abscess  
  - Peritonitis  
  - Breast infection  
  - Complications of abortion  
  - Pneumonia |
| Abdominal pain                  | ASK IF:  
  - Pregnant, length of gestation |  
  EXAMINE:  
  - Blood pressure: low (systolic less than 90 mm Hg)  
  - Pulse fast (110 or more)  
  - Temperature: 38°C  
  - Uterus: state of pregnancy |  
  - Ovarian cyst  
  - Appendicitis  
  - Ectopic pregnancy  
  - Possible term or premature labor  
  - Amnionitis  
  - Abruptio placentae  
  - Ruptured uterus |

*Note: This list does not include all of the possible problems a woman may have during pregnancy or postabortion. It is meant only to identify the problems that put the woman at greater risk of maternal morbidity and mortality.*


### Presenting Signs and Symptoms

Regardless of the woman’s obstetric, menstrual or contraceptive history, health workers should consider the possibility of an abortion-related condition in any woman with symptoms of possible abortion (spontaneous or induced). Remember that a woman may be experiencing emotional as well as physical distress, so it is important to pay careful attention to all of the signs and symptoms.

Symptoms of possible miscarriage or induced abortion include the following in any woman of reproductive age with a history of:

- Amenorrhea:
  - More than a month has passed since her last menstrual period (LMP)
  - Known or suspected pregnancy
- Onset of vaginal bleeding:
  - May be heavy or light (See Table 2.1-5: “Diagnosis of Vaginal Bleeding in Early Pregnancy” for assessment of bleeding.)
May be accompanied by passage of clots or tissue fragments

Crampling or lower abdominal pain similar to menstrual cramps or labor contractions

There are also other obstetric or gynecological conditions that result in vaginal bleeding, abdominal pain and/or similar signs and symptoms. These include ectopic pregnancy, pelvic inflammatory disease (PID) and postpartum hemorrhage. In addition, shock and loss of consciousness in a pregnant woman may be caused by a variety of conditions unrelated to pregnancy such as cerebral malaria or trauma.

If the vital signs are normal and the woman does not appear to be infected (temperature <38°C) or have intra-abdominal injury (non-rigid abdomen), the next step is to determine the cause of her vaginal bleeding. Taking a thorough reproductive history, performing careful physical and pelvic examinations and (where necessary) obtaining appropriate laboratory tests are important in making an accurate diagnosis and treatment plan.

Different Types of Abortion
Based upon her diagnosis, a woman may need one or more components of postabortion care and related counseling and support. The following definitions outline the main types of abortion. The major signs and symptoms are listed in Table 2.1-2.

Threatened Abortion
This is usually vaginal blood loss in early pregnancy. Blood loss may be scanty, with or without low backache and cramp-like pains. The pains may resemble pain experienced when having a menstrual period. The cervix remains closed and the uterus is soft with no tenderness when palpated. The symptoms may continue over a period of time.

Inevitable Abortion/Miscarriage
This presents with vaginal bleeding that may be heavy, with clots or the gestational sac containing the embryo or fetus. The uterus, if palpable, may be smaller than expected. The membranes can rupture at this time and amniotic fluid will be observed. The cervix dilates and tissue or clots may be seen in the vagina or protruding through the os. Blood loss may be excessive. The pain during miscarriage may be as intense as during labor. The mother may present in a state of shock that is out of proportion to the revealed blood loss. This is caused by products of conception becoming trapped in the cervix and will resolve with their removal.

Spontaneous Abortion or Miscarriage
Spontaneous miscarriage is defined as the involuntary loss of the POC prior to 20 weeks gestation. The majority of miscarriages occur in the first trimester or within the first 12–13 weeks of pregnancy. Those occurring after the thirteenth week are sometimes known as late miscarriage. An estimated 15–20% of all confirmed pregnancies will result in miscarriage. An important counseling point is to emphasize that the client did not do anything to cause the miscarriage.
Induced Abortion
This is a voluntary termination of pregnancy before fetal viability. An induced abortion may also be “unsafe,” which is defined as a procedure performed in an environment lacking minimal medical standards or by persons lacking necessary skills or both.4

Incomplete Abortion
This occurs when some, but not all, of the POC have been expelled from the uterus. This may happen in a miscarriage or during an attempt to terminate the pregnancy (induced abortion). If not addressed promptly, an incomplete abortion may result in excessive bleeding and/or infection and lead to more serious, life-threatening problems. An incomplete abortion is the most common abortion-related complication.

Complete Abortion
This occurs when the conceptus, placenta and membranes are expelled completely from the uterus. The pain stops and signs of pregnancy regress. The uterus is firmly contracted on palpation. No further medical intervention is required, although support through the aftermath of pregnancy loss should be available.

Septic Abortion
This is a complication of induced abortion or incomplete miscarriage and is due to ascending infection. Clinically, the mother presents with signs of miscarriage, and may have fever, nausea, headache, foul vaginal discharge and, in some cases, signs of PID. Septic abortion may present as either a localized infection in the uterine tubes and the uterine cavity or as generalized septicemia with peritonitis.

Missed Abortion
This term applies when the embryo dies despite the presence of a viable placenta, and the sac is retained as the cervix remains closed. Embryo death usually occurs before eight weeks gestation, but the mother’s body does not recognize its demise. A brown discharge originating from the degeneration of placental tissue may present and threatened miscarriage may be suspected.
Table 2.1-2: Signs of Abortion

<table>
<thead>
<tr>
<th>Signs and Symptoms</th>
<th>Threatened Abortion</th>
<th>Inevitable Abortion</th>
<th>Incomplete Abortion</th>
<th>Complete Abortion</th>
<th>Missed Abortion</th>
<th>Septic Abortion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>Variable</td>
<td>Severe/ Rhythmical</td>
<td>Severe</td>
<td>Diminishing/ None</td>
<td>None</td>
<td>Severe/ Variable</td>
</tr>
<tr>
<td>Bleeding</td>
<td>Scanty</td>
<td>Heavy/ Clots</td>
<td>Heavy/ profuse</td>
<td>Minimal/ None</td>
<td>Some spotting possible; brownish discharge</td>
<td>Variable, may smell offensive</td>
</tr>
<tr>
<td>Cervical os</td>
<td>Closed</td>
<td>Open</td>
<td>Open</td>
<td>Closed</td>
<td>Closed</td>
<td>Open</td>
</tr>
<tr>
<td>Uterus (if palpable)</td>
<td>Soft, no tenderness</td>
<td>Tender, may be smaller than expected</td>
<td>Tender/ painful</td>
<td>Firm, contracted</td>
<td>Smaller than expected</td>
<td>Bulky, tender, painful</td>
</tr>
<tr>
<td>Additional signs and symptoms</td>
<td>Tissue present in cervix; shock</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Maternal pyrexia</td>
</tr>
</tbody>
</table>

Note: Remember to ensure privacy, confidentiality and dignity throughout all treatment and counseling.


History

Due to the circumstances that may surround spontaneous or induced abortions, the quality and completeness of the information the woman gives often depends on the quality of the communication between the service provider and client. If the woman is unconscious and unable to provide information, it may be necessary to obtain basic information from the person who accompanied her.

For personal, sociocultural and/or legal reasons, many women may be reluctant to provide information at first. Some women may have been compelled to have an abortion and may experience guilt and immediate or long-term regret. Thus, while taking the history and assessing the physical signs and symptoms, it is very important to respect the woman’s needs and provide care without expressing judgment, either verbally or non-verbally. For example, language that implies the idea of failure to be able to carry a baby or similar negative suggestions should be avoided.

To begin, review the information on antenatal records (if applicable and available). Then ask about or confirm information on the following:

- Reproductive history:
  - Date of last normal menstrual period
  - Current contraceptive method
  - Vaginal bleeding (duration and amount)
- Cramping (onset and severity)
- Fainting
- Fever, chills or general malaise
- Abdominal or shoulder pain (may indicate intra-abdominal injury)
- Tetanus vaccination status and possible exposure to tetanus:
  - Insertion of unclean instruments or other materials into the uterus
- General medical information:
  - Drug allergies (especially local anesthetics and antibiotics)
- Bleeding disorders:
  - Sickle cell anemia or thalassemia
  - Hemophilia or platelet disorder
- Current medications (e.g., corticosteroids)
- Recent ingestion of any herbs or medicine:
  - Some may cause serious side effects
- Other health conditions or problems:
  - Malaria during this pregnancy
  - Hypertension
  - Diabetes
  - Any other health concerns

**Ensuring Clients’ Confidentiality, Privacy and Dignity**

Confidentiality means not discussing the client’s personal information with her partner, with the family members(s) accompanying her or with staff members not directly involved in her treatment (except where required in a life-threatening emergency) unless the woman provides permission to do so. Personal information includes her medical history and the conditions bringing her to seek care, the services provided to her and the family planning decisions she makes. If the client wants to involve a spouse or partner in decision-making, however, her wishes should be followed.

Privacy is critical to protecting the client’s confidentiality, sense of security and dignity, and willingness to communicate honestly. No one should be able to see or hear what is being said or done during her care. Often, simple changes in the physical setting where clients are treated or counseled will offer them more privacy.

Dignity means that a client feels self-worth and honor, regardless of her physical circumstances. Ensuring privacy and confidentiality helps a client to maintain her dignity.
The following may disturb a client’s confidentiality, privacy and dignity:

- Leaving the client lying in a busy, open area
- Facing her feet toward the door, with her genitals exposed
- Not using screens or curtains around her
- Not adequately draping her
- Openly discussing her case with anyone who walks by
- Allowing people to walk in and out of the treatment/counseling area freely
- Having casual conversations with other staff during treatment/counseling
- Attempting to discuss care-related information/provide counseling in a busy, non-private environment or in an area where others can easily hear what is being said

Rearranging Patient Service Areas

- Ensuring privacy, confidentiality and dignity for PAC services often involves simple measures. These include actions such as the following in preparation for all clients:
  - Ensure adequate screens, drapes and curtains in the client exam areas.
  - Position exam tables with the foot of the table away from entrances.
  - File client records in a secure place, accessible only to those providing care.
  - Allocate private areas for obtaining client history and counseling.

Youth-Friendly Services

- Some of the recommendations below may vary according to your context. Hold meetings with youth leaders/groups and provider staff to determine which interventions would be appropriate to make PAC services more user-friendly.

  - Consider a separate clinic entrance for adolescent clients to facilitate their attendance and confidentiality.

  - Consider providing convenient hours for youth (such as after school and on weekends); post these hours and times where they can be clearly seen.

  - If possible, provide a separate waiting area for adolescent services.

  - When obtaining information from youth or counseling youth, avoid medical terminology. Many adolescents may have difficulty grasping complex concepts or complicated medical terms, so information needs to be repeated several times or explained in different ways, using simple language and a variety of media such as models, pictures, patient handouts, etc.

Throughout history taking and counseling, encourage the woman to ask questions and express her feelings and concerns. Many women experience short- or long-term negative psychological consequences following an abortion and may need to express their grief and suffering.5-6
Integrating Counseling: Addressing the Client’s Feelings

It is important to note that clients presenting for postabortion care may experience a wide range of feelings as a result of a miscarriage or unsafe abortion. For example, they may fear pain before or during the anticipated procedure, or feel guilt, shame, anxiety or fear that an induced abortion may be discovered (by family, local authorities or others). Across all settings, women who have had spontaneous abortions may experience a great sense of loss, disappointment, frustration and guilt over not having been able to carry the pregnancy to term. (See Table 2.1-3, “Addressing the Postabortion Client’s Feelings.”)


Physical Examination

Remember that during the physical exam, it is important to:

- Maintain privacy:
  - No one should be able to see or hear what is going on.
- Maintain infection prevention precautions.
- Note the general health of the woman, not just the exam specific to her presenting problem:
  - Include examination of the client’s heart, lungs and extremities.

If the vital signs are normal and the woman does not need urgent care or referral, the next step is to determine the cause of her vaginal bleeding, if applicable. After obtaining a thorough reproductive history, a careful physical examination, including a pelvic exam and laboratory tests, is essential in making an accurate diagnosis and treatment plan. A sample form for documenting this information is included at the end of this session.

Abdominal Examination

- Check for:
  - Masses or gross abnormalities
  - Distended abdomen with decreased bowel sounds
  - Rebound tenderness with guarding
  - Suprapubic or pelvic tenderness
- Perform pelvic examination:
  - The purpose of the pelvic examination is to determine the size, consistency and position of the uterus, to check for tenderness and to determine the degree of cervical dilatation. A thorough pelvic exam can also help to rule out PID and ectopic pregnancy. As part of this exam, careful assessment of the vagina and cervix to check for tears and bleeding is essential.

Tips for Maintaining Privacy

- Fully close and secure doors or curtains.
- Close curtains on windows.
- Position exam table so that the client’s feet are not facing the door when lying down.
- Keep the woman covered, exposing only what is needed for each part of the exam.
- Knock before entering an exam room and wait for permission to enter.
After completing the recto-vaginal examination, the provider should immediately remove her/his gloves and decontaminate and discard them according to recommended infection prevention practices.

Prior to the pelvic examination, explain the purpose of the examination to the client and be sure she has emptied her bladder. For the exam, the client should be on an examination table equipped with stirrups or where she can comfortably assume the lithotomy position. She should also be covered with a cloth or drape to protect her dignity and privacy. The clinician should wear new, undamaged or high-level disinfected gloves.

Speculum Examination
- Before inserting the speculum:
  - Look at the genital area to see if there is bleeding and if so, how much.
  - Check the odor and color of the vaginal blood or discharge.
- Next, insert the speculum to look at the cervix. It may be necessary to use a smaller speculum when examining adolescents.
- Remove any visible POC from the vaginal canal or cervical os and keep the tissue for examination.
- Note any abnormal-smelling discharge, the amount of bleeding and whether the cervix is open (dilated); check for cervical or vaginal tears or perforations, or pus in the cervix.
- Cervical infection increases the chance of postoperative uterine infections, including acute PID. If infection is present or suspected, take samples for bacteriological culture if possible and begin antibiotic treatment with broad-spectrum antibiotics before performing uterine evacuation.

Bimanual Examination
- **Assess the size of the uterus.** Compare the actual size of the uterus with the date of the LMP. With an incomplete abortion, the uterus usually is smaller than the LMP might suggest.
- **Assess the shape and position of the uterus.** Correctly determining the shape and position of the uterus is critical to the safety and success of the procedure.
- If the uterus is larger than expected, it may indicate:
  - A more advanced pregnancy than the LMP suggests
  - A multiple pregnancy
  - A uterus filled with blood clots (i.e., postabortal syndrome)
  - A molar pregnancy (rare)
  - Presence of uterine fibroids
- If the uterine size is difficult to assess, it may be that the uterus is tilted backward (retroverted), the client is overweight or has abdominal guarding (not relaxing the abdomen so that the uterus cannot be felt). It is important not to begin uterine evacuation until the size of the uterus has been determined. If problems in determining uterine size or position are encountered, have a more experienced clinician (if available) assess the uterine.
size. If there is any doubt, treat the woman as if the pregnancy was advanced further than suspected initially.

- **Anteverted uterus** (tilted forward). If the uterus is excessively anteverted (anteflexed), the clinician must be especially careful during the procedure because the risk of perforation may be increased when performing manual vacuum aspiration (MVA).

- **Retroverted uterus** (tilted backwards). A mildly retroverted uterus may be best palpated by recto-vaginal examination. (Perforation may be more likely if the clinician is not aware that the uterus is markedly retroverted.)

- **Laterally displaced uterus** (tilted to one side). If the uterus is pushed laterally to one side or the other, the clinician must be especially careful during the procedure or the risk of perforation may be increased.

- Check adnexae and cervical motion tenderness:
  - Fullness and/or tenderness in adnexae and/or cervical motion tenderness may be indications of other conditions such as ectopic pregnancy or pelvic infection.

### Laboratory Tests

- Blood group and Rhesus status:
  - Give Rh (D) immune globulin, if available, (or prescribe it) to women who are Rh-negative.

- Hemoglobin

- Malaria and/or other relevant testing

- HIV counseling and testing (if client does not “opt out”)

If possible, do other relevant testing at this time. Include preventive measures such as tetanus toxoid.

### Vaginal Bleeding in Early Pregnancy

This section will focus on vaginal bleeding that occurs during the first half (20 weeks) of pregnancy. Because vaginal bleeding can be an important danger sign of pregnancy or postabortion, an accurate diagnosis will guide you in providing the appropriate care or treatment in a timely manner. The following information will help in assessing and managing the problem of vaginal bleeding.

If an ectopic pregnancy is suspected, perform a bimanual exam gently; an early ectopic pregnancy is easily ruptured.

A bimanual exam in suspected ectopic pregnancy should be performed only by a provider trained in this skill and only when facilities for emergency surgery can be organized.
General Guidelines for Management of Vaginal Bleeding

Rapid assessment is the first step in assessing the woman who presents with vaginal bleeding. If shock is suspected, immediately begin treatment.

- Consider ectopic pregnancy in any woman with:
  - Shock
  - History of PID or ectopic pregnancy
  - Threatened abortion
  - Unusual complaints about abdominal pain
  - Smaller uterus than expected
  - Cervical motion tenderness

- Consider incomplete abortion in any woman of reproductive age with a history of a missed period, vaginal bleeding and one or more of the following:
  - Cramping
  - Partial expulsion of products of conception
  - Dilated cervix

- An IV infusion will be needed for severe vaginal bleeding, shock and any related condition that may be life-threatening.

Be sure to determine gestational age before performing a vaginal exam on a pregnant woman who presents with bleeding. A pelvic exam should not be performed on a woman in later pregnancy (after 20 weeks) experiencing vaginal bleeding. Follow local guidelines.

---

**Key Points on Spontaneous Abortion/Miscarriage**

- The term “miscarriage” is used to describe spontaneous loss of pregnancy before 20 weeks.
- Terms that perpetuate the notion of failure to be able to carry a baby or negative connotations should be avoided.
- Grieving is an essential part of the recovery process following miscarriage.
- Bed rest will not prevent miscarriage.
- Blood loss and pain associated with miscarriage can be profuse and profound and overwhelming for the mother.
### Table 2.1-3: Addressing the Postabortion Client’s Feelings

<table>
<thead>
<tr>
<th>Client’s Feelings</th>
<th>Why</th>
<th>Provider Response</th>
</tr>
</thead>
</table>
| FEAR              | Fear of:  
  - Feeling pain during the procedure  
  - Experiencing complications resulting from the procedure  
  - Feeling pressure to accept a permanent or long-term family planning method | Examples:  
  - Explain what to expect during the procedure and tell the client what pain control medication will be used (if any).  
  - Tell the client about the risk of complications.  
  - Tell the client that she may choose whether to receive a family planning method immediately after the postabortion care procedure. |  
|                   | Fear of:  
  - Dying  
  - Becoming infertile  
  - Becoming disabled  
  - Being prosecuted  
  - The “unknown” (what will happen at the hospital or facility)  
  - Not receiving treatment because of inability to pay for services | Examples:  
  - Listen.  
  - Reassure the client.  
  - Find out why or what the client fears.  
  - Provide information.  
  - Provide or arrange for family planning counseling or referral for other services if needed.  
  - Be aware of one’s own feelings toward the client and try not to be judgmental. |

### Table 2.1-4: Determining Uterine Size in the First Trimester

<table>
<thead>
<tr>
<th>Weeks LMP</th>
<th>Cervical Signs</th>
<th>Uterine Signs</th>
</tr>
</thead>
<tbody>
<tr>
<td>None (Non-pregnant uterus)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
  - Localized softening over the site of the placenta.  
  - Enlargement of uterus usually not palpable on examination. |  
  - Uterus is about 7–8 cm long, 4–6 cm wide. |
| 5th–7th week |  
  - Chadwick’s sign: Cervix becomes bluish color (due to increased blood supply). Cervix softened, can be compressed during bimanual exam. |  
  - Uniform softening, round in shape.  
  - Uterus is slightly enlarged. |
| 6th–8th week |  
  - Cervix bluish, soft |  
  - Uterus is soft, round.  
  - Uterus is palpable above pubic symphysis during abdominal examination. Enlarged size dependent on gestational age. |
| 12th week or greater | | |
## Table 2.1-5: Diagnosis of Vaginal Bleeding in Early Pregnancy

<table>
<thead>
<tr>
<th>Presenting Symptom and Other Signs/Symptoms Typically Present</th>
<th>Symptoms and Signs Sometimes Present</th>
<th>Probable Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Light bleeding</td>
<td>▪ Cramping/lower abdominal pain</td>
<td>▪ Threatened abortion</td>
</tr>
<tr>
<td>▪ Closed cervix</td>
<td>▪ Uterus softer than normal</td>
<td></td>
</tr>
<tr>
<td>▪ Uterus corresponds to dates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Light bleeding</td>
<td>▪ Fainting</td>
<td>▪ Ectopic pregnancy</td>
</tr>
<tr>
<td>▪ Abdominal pain</td>
<td>▪ Tender adnexal mass</td>
<td></td>
</tr>
<tr>
<td>▪ Closed cervix</td>
<td>▪ Amenorrhea</td>
<td></td>
</tr>
<tr>
<td>▪ Uterus slightly larger than normal</td>
<td>▪ Cervical motion tenderness</td>
<td></td>
</tr>
<tr>
<td>▪ Uterus softer than normal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Light bleeding</td>
<td>▪ Light cramping/lower abdominal pain</td>
<td>▪ Complete abortion</td>
</tr>
<tr>
<td>▪ Closed cervix</td>
<td>▪ History of complete expulsion of conceptus, placenta and membranes</td>
<td></td>
</tr>
<tr>
<td>▪ Uterus smaller than the dates</td>
<td>▪ Uterus softer than normal</td>
<td></td>
</tr>
<tr>
<td>▪ Uterus softer than normal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Heavy bleeding</td>
<td>▪ Cramping/lower abdominal pain</td>
<td>▪ Inevitable abortion</td>
</tr>
<tr>
<td>▪ Dilated cervix</td>
<td>▪ Partial expulsion of products of conception</td>
<td></td>
</tr>
<tr>
<td>▪ Uterus corresponds to dates</td>
<td>▪ Nausea/vomiting</td>
<td></td>
</tr>
<tr>
<td>▪ Uterus larger than dates</td>
<td>▪ Spontaneous abortion</td>
<td></td>
</tr>
<tr>
<td>▪ Uterus softer than normal</td>
<td>▪ Cramping/lower abdominal pain</td>
<td></td>
</tr>
<tr>
<td>▪ Partial expulsion of products of conception that resemble grapes</td>
<td>▪ Ovarian cysts (easily ruptured)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Early onset pre-eclampsia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ No evidence of a fetus</td>
<td></td>
</tr>
</tbody>
</table>

Note: Light bleeding: takes longer than 5 minutes for a clean pad or cloth to be soaked. Heavy bleeding: takes less than 5 minutes for a clean pad or cloth to be soaked.

Figure 2.1-3: Flow Chart for Diagnosis and Management of a Postabortion Client

The steps involved in evaluating and treating clients with incompletion abortion are summarized in the following chart.

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Rapid Assessment (screening)</th>
<th>If There Are Signs of Shock, Immediate Action Is Required!</th>
</tr>
</thead>
<tbody>
<tr>
<td>A woman of reproductive age with:</td>
<td>Assess for signs of shock:</td>
<td></td>
</tr>
<tr>
<td>• Delayed menses</td>
<td>• Rapid weak pulse</td>
<td>• Treatment: see Module 2.6</td>
</tr>
<tr>
<td>• Vaginal bleeding</td>
<td>• Low blood pressure</td>
<td>• After treatment of shock started, proceed with medical evaluation</td>
</tr>
<tr>
<td>• Cramping or lower abdominal pain</td>
<td>• Pallor and sweatiness</td>
<td></td>
</tr>
<tr>
<td>• Passage of POC</td>
<td>• Rapid breathing</td>
<td></td>
</tr>
<tr>
<td>• Unexplained fever/chills</td>
<td>• Anxiousness, confusion or unconsciousness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Temperature &gt;38°C</td>
<td></td>
</tr>
</tbody>
</table>

**Medical Evaluation**

<table>
<thead>
<tr>
<th>History</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of LMP (missed period), duration and amount of bleeding, duration and</td>
<td></td>
</tr>
<tr>
<td>severity of cramping, types of contraceptive (IUD, implants, injectables),</td>
<td></td>
</tr>
<tr>
<td>abdominal pain, shoulder pain, drug allergies, bleeding or clotting disorder</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical exam</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vital signs, examination of heart, lung, abdomen and extremities, indication</td>
<td></td>
</tr>
<tr>
<td>of systemic problem (sepsis, intra-abdominal hemorrhage)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pelvic exam</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaginal/cervical trauma, pus, pain on motion, uterine size, position and</td>
<td></td>
</tr>
<tr>
<td>tenderness</td>
<td></td>
</tr>
<tr>
<td>Stage of abortion</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove any visible POC; if possible, determine Rh and tetanus status</td>
<td></td>
</tr>
</tbody>
</table>

**Treatment**

<table>
<thead>
<tr>
<th>Moderate to light vaginal bleeding</th>
<th>Severe vaginal bleeding</th>
<th>Intra-abdominal injury</th>
<th>Infection (sepsis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Clean pad not soaked after 5</td>
<td>• Heavy, bright red</td>
<td>• Distended abdomen</td>
<td>• Fever, chills</td>
</tr>
<tr>
<td>minutes</td>
<td>vaginal bleeding</td>
<td>• Decreased bowel</td>
<td>• Foul-smelling</td>
</tr>
<tr>
<td></td>
<td>with or without clots</td>
<td>sounds</td>
<td>vaginal discharge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tense, hard abdomen</td>
<td>• History of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Rebound tenderness</td>
<td>unsafe abortion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Nausea, vomiting</td>
<td>• Abdominal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Shoulder pain</td>
<td>• Prolonged</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Fever</td>
<td>bleeding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Abdominal pain,</td>
<td>• Flu-like</td>
</tr>
<tr>
<td></td>
<td></td>
<td>cramping</td>
<td>symptoms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Treatment or</td>
<td>• Treatment or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>referral</td>
<td>referral</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Referral
Triage and emergency treatment based upon the type of facility and available staff will allow timely
evaluation, stabilization and referral as needed to the appropriate level of care. If transfer to another
level of care is needed, refer to the following guidelines that outline important actions for referring
any mother.

Referral Guidelines: Explain the Reason for the Referral to the Woman
- Include her family members or support person(s) as appropriate
- Arrange transport and notify the referral facility
- Prepare to transfer the woman
- Document the referral:
  - Complete the required paperwork and include:
    - Reason for the referral
    - Findings of any examinations or lab tests
    - All treatments given
    - Time and date
    - Name and signature of person completing the form(s)

If the Referral Is Delayed, Not Possible or the Woman/Family Refuse the Referral
- Be sure the mother is clinically stable:
  - Start an IV if needed to maintain hydration and an open line for any medications
  - Monitor for any signs of shock and manage accordingly
  - Counsel and support the woman/family as appropriate:
    - Integrate PAC counseling, including FP and selected reproductive health as appropriate
Sample PAC Client Information Form

1. Socio-Demographic Data:

Date: _______ Facility Name: ______________________ Location: ______________
Client’s Full Name: __________________________________________________________________
Client’s Address: _____________________________________________________________________
____________________________________________________________________________ District: __________________________
Age: ___________ Occupation: __________________________________________________________________
Education Level: _______________________________________________________________________
Husband/Partner’s Name: __________________________________________________________________
Husband/Partner’s Occupation: __________________________________________________________________
Number of Children: Living: ____ Deceased: ____
Age of Last Living Child: _________ Previous Conception Practice: Yes ____ No _____
If yes, method used: _______________ Date of last visit to clinic: ________________

2. Medical History:

a. LMP: ______________________ No. of bleeding days: ______________________

b. Current Medical History:
   Any current illness Yes _________ No _________
   Taking medication? (Including traditional herbs) Yes _________ No _________

c. Past Medical History:
   Severe headaches Yes _________ No _________
   Severe varicose veins Yes _________ No _________
   Jaundice Yes _________ No _________
   Renal disease Yes _________ No _________
   High blood pressure Yes _________ No _________
   STI/HIV Yes _________ No _________
   Epilepsy Yes _________ No _________
   Tuberculosis Yes _________ No _________
   Heart problems Yes _________ No _________
   Allergies Yes _________ No _________
   Bleeding disorders Yes _________ No _________
   (sickle cell, thalassemia, hemophilia or platelet disorder)
<table>
<thead>
<tr>
<th>Grade</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td></td>
</tr>
</tbody>
</table>

3. Examination:
   a. Physical:

   Blood Pressure: ___________   Pulse: _________   Respiration: _______________

   Weight: _______   Temperature: _______   Pallor: Yes: __________   No _________

   Breasts: __________________________   Heart: __________________________________

   Abdomen: ________________________________________________________________

   b. Pelvic Examination:

   External Genitalia: _________________________________________________________

   Speculum: Vagina: _________________________________________________________

   Cervix: ________________________________________________________________

   Others: _________________________________________________________________

   Discharge: _______________   Type: ______________________________

   Digital: Uterus: _________________________________________________________

   Size: _______________   Consistency: __________________________

   Adnexa: _______________   Cervical Dilation: __________________

   Presence of POC: Yes: _____   No: _____   Other (state): _______________

   c. Laboratory Tests:

   Urine: Sugar: _______________   Albumin: __________________________

   Blood: Hemoglobin: _______________   Blood Group and Rhesus: __________

   Pregnancy Test: Positive: _______________   Negative: __________________
4. **Diagnosis:**
   a. Incomplete Abortion: ______________________________________________________
   b. Complete Abortion: _______________________________________________________
   c. Complications (specify): ___________________________________________________
       __________________________________________________________
       __________________________________________________________
   d. Other Diagnosis (specify): ________________________________________________
       __________________________________________________________
       __________________________________________________________
   e. If abortion, specify method of Uterine Evacuation:
      MVA: ______  EVA: ______  SC: ______  Other (specify): _________________
   f. Cadre of Provider: ______________________________________________________
   g. Pain Management:
      Yes (specify): __________________________________________________________
      No (state reason): ______________________________________________________

5. **Management:**
   a. Medicines: At Facility _________________  Home Prescription _________________
      Follow-up Date: ______________________
   b. Counseling (specify topics): ______________________________________________
       __________________________________________________________
       __________________________________________________________
       __________________________________________________________

6. **Family Planning counseling done?**
   With partner ________  without partner ________

7. **Method accepted before discharge:**
   Yes ______  No ______
8. Method of contraception adopted before discharge:

Pill: Type: ___________________________ No of Cycles: ____________

IUD: Type: ___________________________

Condoms: ___________________________ No Issued: ______________

Depo Provera®: ______________________ Implants: ______________________

Tubal Ligation: ______________________ Other (specify): ______________________

None: (Reason): ___________________________

9. Referred to:

Name of Facility: ___________________________

Location: __________________________ Date: __________________________

Time: __________ Contact Person: __________________________

Method of Referral: __________________________

________________________________________________________________________

Expected Method of Feedback: __________________________

Date of Discharge: __________________________

Name/Title of Provider Discharging: __________________________

General Remarks: __________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Sample referral slip:

Adapted from: Reproductive Health Association of Cambodia. Form can be downloaded for free, unrestricted use at: http://www.infoforhealth.org/pac/materials/Referral_Slip.pdf.
REFERRAL SLIP

Name of Clinic: ________________________________
Patient Name: __________________________________
Patient Address: ________________________________
Sex: ____________________________ Age: ____________
Treatment Date: ________________________________
Diagnosis: ______________________________________
Temporary Treatment: _____________________________
Refer To: ________________________________________
For: ____________________________________________

Vital Signs

<table>
<thead>
<tr>
<th>Initial Contact</th>
<th>Before Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temp:</td>
<td>Temp:</td>
</tr>
<tr>
<td>BP:</td>
<td>BP:</td>
</tr>
<tr>
<td>Pulse:</td>
<td>Pulse:</td>
</tr>
<tr>
<td>Resp:</td>
<td>Resp:</td>
</tr>
</tbody>
</table>

Day: _______ Month: _______ Year: _______
Signature: ___________________________
Clinic Physician: ____________________

Adapted from Reproductive Health Association of Cambodia (RHAC)
Pocket Copies of Provider Job Aids
These pocket copies of provider job aids can be placed on cardboard and placed in providers’ pockets for quick reference when providing PAC services.

Provider Quick Checklist for Postabortion Care Services

Pre-Procedure:
- Welcome the client, make her comfortable
- Assess client to ensure:
  - vital signs do not indicate shock
  - vaginal bleeding is not excessive
  - no abdominal injury is present
- If needed, make arrangements for doctor availability for procedure or refer to higher level facility
- Ensure privacy and confidentiality
- If client consents, involve husband/support person in all counseling
- Ask/Observe/Examine
- Describe procedure
- Obtain informed consent for procedure and pain management
- Ensure patient gets adequate pain medication
  - IM – 30 minutes before procedure
  - By mouth –30 to 60 minutes before procedure
- Ensure that all equipment is ready
- If the patient’s condition is stable and time permits, do counseling on FP methods and have patient decide which FP method to use, particularly important if patient desires IUD
**Signs of Shock** | **Signs of Infection** | **Signs of Abdominal Injury**
---|---|---
- Skin cool and clammy  
- Systolic BP < 90/60  
- Pulse ≥ 110 and weak  
- RR > 30  
* If in shock, consider ruptured ectopic pregnancy, NO FLUIDS BY MOUTH, begin IV fluids and infuse IV fluids.* | - Temp ≥ 38° C  
- Foul smelling vaginal discharge  
- Lower abdominal pain (tender uterus)  
- Rebound tenderness  
- Prolonged bleeding  
- Purulent cervical discharge  
- Cervical motion tenderness  
* If septic, begin antibiotics as soon as possible before uterine evacuation.* | - Nausea, vomiting, fever,  
- Abdominal or shoulder pain  
- Prolonged bleeding  
- Distended abdomen, absent bowel sounds  
- Rebound tenderness  
* If abdominal injury suspected, stabilize and transfer to higher level of care.*

During Procedure

☐ Ensure privacy

☐ Have assistant monitor vital signs and provide verbal support

☐ Monitor client closely for pain, use additional pain medication if needed and it is safe for the patient

☐ Reassure patient during the procedure

☐ Follow all infection prevention procedures

☐ Inspect tissue to ensure that procedure is complete
Post Procedure

- Observe client for 1 to 2 hours; check vital signs and vaginal bleeding every 30 minutes
- Provide pain medication if cramping present
- Continue to ensure privacy and confidentiality
- If patient agrees, include husband/family member/friend when giving instructions/counseling including:
  - Rest
  - Nothing in vagina and no sex until vaginal bleeding has ended x 2 days
  - Take and complete medicines given by provider
  - Watch for warning signs that indicate the need for medical attention:
    - Severe abdominal pain
    - Fever
    - Bleeding heavier than a normal period
    - Foul odor from vagina
    - Bleeding that lasts more than two weeks

- Tell patient to avoid becoming pregnant for six months. This provides her body a rest and helps in promoting a healthier next pregnancy
- Do family planning counseling and help her select a FP method before discharge if she desires a method. Remember that postabortion care has not been completed until FP counseling and an opportunity to choose a FP method has been provided!
- Discharge client after 1 to 2 hours if she is comfortable, stable, able to walk without assistance
- If FP method not selected, schedule return visit for FP method in two weeks; provide condoms to use until patient decides on a FP method
- Tell patient, as needed, about need for:
  - Malaria prophylaxis
  - Tetanus prophylaxis
  - HIV counseling and testing
  - STI evaluation
- Record all findings in client record, complete PAC register.
<table>
<thead>
<tr>
<th>Contraceptive Method</th>
<th>When to Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Oral Contraceptives (combined or progestin-only),</td>
<td>Immediately, even if injury to genital tract or possible or confirmed infection</td>
</tr>
<tr>
<td>• Combined patch</td>
<td></td>
</tr>
<tr>
<td>• Condoms (male or female)</td>
<td></td>
</tr>
<tr>
<td>• Withdrawal</td>
<td></td>
</tr>
<tr>
<td>• Vasectomy</td>
<td></td>
</tr>
<tr>
<td>• IUD</td>
<td>If infection present, once infection is ruled out or resolved</td>
</tr>
<tr>
<td>• Female Sterilization</td>
<td></td>
</tr>
<tr>
<td>• Fertility Awareness Methods</td>
<td></td>
</tr>
<tr>
<td>• Combined vaginal ring</td>
<td>Once injury to genital tract has healed</td>
</tr>
<tr>
<td>• Spermicides</td>
<td></td>
</tr>
<tr>
<td>• Diaphragms, cervical caps</td>
<td></td>
</tr>
<tr>
<td>• Female Sterilization</td>
<td></td>
</tr>
<tr>
<td>• Combined vaginal ring</td>
<td>In cases of uncomplicated uterine perforation</td>
</tr>
<tr>
<td>• Spermicides</td>
<td></td>
</tr>
<tr>
<td>• Diaphragms</td>
<td></td>
</tr>
<tr>
<td>• Cervical caps</td>
<td></td>
</tr>
<tr>
<td>• Fertility awareness methods</td>
<td>Should be delayed until there are no noticeable secretions or bleeding related to injury or perforation. Calendar-based methods should be delayed until at least one monthly bleeding after all such secretions or bleeding has stopped.</td>
</tr>
</tbody>
</table>


Emergency Treatment: Uterine Evacuation Methods

Summary
Because most complications result from retained products of conception, removal of the contents of the uterus (uterine evacuation), is one of the primary components of emergency treatment. Uterine evacuation can be accomplished by one of several methods based on the type of facility, available equipment, staff and local conditions. The three main methods of evacuation are vacuum aspiration, sharp curettage (also called dilatation and curettage) and pharmacological methods. This chapter presents an overview and description of each method. The techniques of each method are presented in separate sessions.

Session Objectives
At the end of this session, participants will be able to:
1. Describe how each method of uterine evacuation works
2. List the main advantages and disadvantages of each method
3. Identify the instruments (or parts) used in each method as appropriate
4. Describe any indications, contraindications and precautions as applicable for each method
5. Describe the counseling appropriate during any uterine evacuation procedure

Uterine Evacuation Methods
First trimester incomplete abortion for uterine size up to 12 weeks gestation can be treated by manual vacuum aspiration or sharp curettage. Vacuum aspiration is generally preferred to sharp curettage because of the lower rate of minor complications and reduced need for surgical facilities.1

Vacuum Aspiration
Vacuum aspiration uses suction to remove uterine tissue through a cannula (hollow tube) with minimal scraping of the uterine walls. Vacuum aspiration has been used for more than two decades in industrialized countries and may be performed by using suction provided by a manual vacuum aspiration syringe, foot pump or electric pump.2 Cannulae used for vacuum aspiration may be flexible plastic, rigid plastic or metal. A vacuum of at least 66 cm of mercury is required to evacuate the uterus fully and quickly.3 A review of each of the methods is given below.

Manual Vacuum Aspiration and Foot Pump Suction Evacuation
In the absence of electricity, there are two methods in which vacuum aspiration can be performed to remove the products of conception from the uterus: use of a specially designed hand-held syringe to apply suction (MVA) or use of foot pump suction evacuation (FSE).
Manual Vacuum Aspiration
Manual vacuum aspiration (MVA) uses a hand-held vacuum syringe and flexible plastic cannulae. MVA can be used to treat incomplete abortions through 12 weeks uterine size.

The syringes come as no-valve, single-valve, double-valve and the newest model, MVA Plus. It is operated using one hand. Once the vacuum is obtained, the valve is kept closed until the cannula is fitted into the syringe, at which point the valve is opened.

No-valve syringes are not recommended because they do not create a vacuum until the cannula is inserted into the uterus. This increases the risk of uterine perforation.4

Types of MVA Syringes and Cannulae

No-Valve Syringe with Cannula

Single-Valve Syringe with Cannulae

Double-Valve Syringe with Cannulae

MVA Plus Syringe
Foot Pump Suction Evacuation
An alternative device for uterine evacuation is the foot pump suction evacuator. The FSE uses flexible cannulae and is operated by the provider performing the uterine evacuation procedure. Vacuum can be easily obtained. The provider controls the vacuum by digitally occluding with the thumb a small venting port at the point of attachment of the cannula to the suction tubing. A study published in the South African Medical Journal in 1998 by Gaertner et al. compared the FSE with the manual vacuum aspirator for uterine evacuation. The findings showed that the FSE and MVA were similar in effectiveness and outcomes. The time to perform the FSE was not significantly different in operative blood loss estimation or the time needed to perform the procedure. There were no cases of uterine perforation, cervical injuries or blood transfusions. Both techniques were easy to use.5

MVA and foot pump suction do not require electricity and can be used in remote settings, thus extending women’s access to emergency treatment.

Electric Vacuum Aspiration
Electric vacuum aspiration (EVA) uses an electric pump and cannulae to evacuate the uterus by providing either intermittent or continuous suctioning. Most devices provide a continuous level of suction. However, newer models may also provide intermittent suction.

EVA involves the use of a cannula that is inserted into the uterus and then attached by a tube to the machine. Once the machine is turned on, the cannula is moved around gently until all the tissue of the products of conception is removed from the uterus. EVA can be used for uterine evacuation during the first and second trimesters of pregnancy to remove retained tissue caused by incomplete abortion or miscarriage.

Though VA and sharp curettage are equally effective for treatment of incomplete abortion,6 women undergoing VA procedures experience less blood loss and less incidence of uterine perforation than women undergoing sharp curettage.

EVA, MVA and FSE have the same effectiveness rate.7 There is no evidence showing a significant difference in the rate of complications among these methods. Patient satisfaction for EVA and MVA is also comparable, aside from the noise level.
Table 2.2.1: Comparisons of Electric Vacuum Aspiration, Foot Pump Suction Evacuation and Manual Vacuum Aspiration

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Electric</th>
<th>Foot Pump</th>
<th>Manual Vacuum Syringe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>98%</td>
<td>Similar to MVA</td>
<td>99%</td>
</tr>
<tr>
<td>Complication rates</td>
<td>Low complication rates</td>
<td>Low complication rates</td>
<td>Low complication rates</td>
</tr>
</tbody>
</table>
| Cannulae                               | - May have metal cannula or plastic cannula  
                                        - Cannula sizes from 4–16 mm | - Uses only plastic cannula  
                                        - Cannula sizes from 4–14 mm | - Uses only plastic cannula  
                                        - Cannula sizes from 4–12 mm |
| Capacity                               | 320 to 1,200 cc               | 320 cc to 1,200 cc             | 60 cc (MVA)           |
| Portability                            | Needs dependable source of electrical power | Does not need electricity | Does not need electricity |
| Suction                                | Intermittent or constant suction | Intermittent or constant, controlled by the provider | Suction decreases as syringe fills (MVA) |
| Gestational age for use for incomplete abortion | Can be used in second trimester | Can be used only in first trimester | First trimester only; can use only up to 12 weeks since LMP (first day of last menstrual period) |

Note: With regard to patient satisfaction with EVA compared to MVA: Patients reported no difference in pain, anxiety, bleeding or acceptability; both EVA and MVA groups were highly satisfied; there were no differences in reported pain levels or satisfaction; more EVA patients were bothered by noise; and there were no differences in reported pain levels.


Contraindications for Manual Vacuum Aspiration and Foot Pump Suction Evacuation Use
- Clients with uterine size over 12 weeks LMP (MVA)
- Use in clients with acute cervicitis or pelvic infection, except in an emergency
- Clients with large fibroids unless emergency back-up is available

Precautions for Foot Pump and Manual Vacuum Aspiration Use
In the following cases, VA should be used with caution, and only in facilities with full emergency back-up:
- Clients with:
  - History of bleeding disorders:
    - Risk of excessive bleeding or hemorrhage
  - History or suspicion of prior uterine perforation:
- Risk of injuring the bowel
- Severe anemia:
  - Risk of severe shock and death
- Hemodynamic instability due to cardiac disease, hemorrhage or septic shock:
  - Risk of severe shock and death
- Uterine fibroids that make it impossible to assess the duration of gestation:
  - Risk of perforation
- In the presence of infection, proceed only with antibiotic coverage (antibiotic therapy should be started prior to start of the procedure):
  - The client may require referral to a higher level of care.

**Sharp Curettage (Dilatation and Curettage)**

The World Health Organization (WHO) recommends the use of sharp curettage (also called dilatation and curettage or D&C) only when vacuum aspiration is not available. This method uses a curette or a similar metal surgical instrument to empty the uterus. The procedure has usually been performed in a surgical facility under general or regional anesthesia, or heavy sedation. A comparison of vacuum aspiration and sharp curettage is shown in the following table.

<table>
<thead>
<tr>
<th>Vacuum Aspiration</th>
<th>Sharp Curettage (D&amp;C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>98% effective</td>
<td>99% effective</td>
</tr>
<tr>
<td>Women experience less pain</td>
<td>Women experience more pain than with vacuum aspiration</td>
</tr>
<tr>
<td>Fewer complications than sharp curettage</td>
<td>Scrapping with sharp, metal curette</td>
</tr>
<tr>
<td>Vacuum suction with plastic cannula or metal cannulae</td>
<td>Mechanical dilatation often required</td>
</tr>
<tr>
<td>Minimal cervical dilatation required</td>
<td>Heavy sedation, analgesia and/or general anesthesia often used, but can be performed under light sedation</td>
</tr>
<tr>
<td>Analgesia, light sedation and/or local anesthesia can be used</td>
<td>When performed with general anesthesia, associated with increased risks of blood loss, cervical injury, uterine perforation and subsequent abdominal</td>
</tr>
<tr>
<td>Associated with minimal or no side effects</td>
<td>hemorrhage</td>
</tr>
<tr>
<td>Can be performed by midwife, general MD or other trained health provider</td>
<td>Usually performed only by trained gynecologist or general MD</td>
</tr>
<tr>
<td>Outpatient procedure, reducing the need for hospital stay</td>
<td>Usually done in operating theater; often requires hospital stay; however, studies indicate that sharp curettage can be done safely in outpatient department</td>
</tr>
<tr>
<td>Associated with less bleeding than sharp curettage</td>
<td>Associated with more bleeding than VA, but smaller chance of requiring a blood transfusion if done with systemic anesthesia</td>
</tr>
</tbody>
</table>
Indications for Sharp Curettage
Sharp curettage has been effectively used for many conditions. Some of the indications include:

- Excessive vaginal bleeding
- Abnormal vaginal bleeding
- Polyps
- Incomplete abortion:
  - When VA not available
- Molar pregnancy:
  - Risk of uterine perforation is high with D&C; VA is safer and associated with less blood loss
- Diagnostic:
  - Endometrial cancer
  - Determining cause of vaginal bleeding

Contraindications for Sharp Curettage
There are very few contraindications to this method:

- Known or suspected viable pregnancy (if pregnancy desired)
- Contraindications to sedation or anesthesia

Medication or Pharmacological Methods
Misoprostol
Misoprostol is a prostaglandin that was initially developed to treat gastrointestinal problems. Prostaglandins are a group of chemicals made by nearly all of the body’s cell membranes. Different
prostaglandins have different effects on the body; they can help treat inflammation and pain, raise or lower blood pressure, affect the immune system and stimulate uterine contractions and labor. Research has been completed that indicates that 600 μg of misoprostol provided orally is an effective dosage for use in postabortion care. Studies for sublingual dosage amounts for use in postabortion care are ongoing. WHO has included misoprostol on its list of essential medicines for miscarriage and incomplete abortion: http://www.who.int/selection_medicines/committees/expert/17/application/misoprostol/en/.

**Expectant Management**

Spontaneous abortion with partial expulsion of the products of conception sometimes resolves itself as part of the natural process. Over time, the remaining uterine contents will be expelled without any intervention. Expectant management is allowing this process to take place. During this time, however, the provider must monitor the client for signs of any complications and ensure that complete uterine evacuation has occurred. Follow local guidelines about offering this option to women. In general, expectant management should be offered only with the following circumstances:

- Clients with uncomplicated spontaneous abortions
- Availability of skilled care and emergency services in case of complications
- Availability of ultrasound and human chorionic gonadotropin monitoring capability
COUNSELING BEFORE, DURING AND AFTER UTERINE EVACUATION

Remember that counseling should be integrated throughout postabortion care. It is not possible to outline exactly what every client needs, and when. The content, context and timing of counseling will differ from client to client. The provider must consider that the client will need counseling before, during and after the procedure. The following checklist is a general guideline for counseling related to the uterine evacuation procedure. Additional counseling topics and information are incorporated throughout this manual as appropriate.

Be sure that all counseling and health care information is explained in the language that the client understands. Also, explain any medical terms and always encourage the client to ask questions or express any concerns she may have.

**Before:**

Explain the type of uterine evacuation procedure to be done, including:

- Any contraindications, risks and benefits
- Requirements for referral in the event of an emergency
- Anticipated length of the procedure and expected length of facility stay

Explain how the procedure is done:

- What will happen, step by step, including expected pain level
- Any drugs that will be used (including pain control) and effects
- Show the client the equipment that will be used and the room where the procedure will be done, if possible
- Obtain any written consent needed
- Explore the client’s needs and feelings as appropriate; include partner and/or any family members/friends who are present, with client’s permission

Family planning counseling:

- If not previously done, and the patient’s condition is stable, introduce FP counseling and continue counseling and FP services after the procedure
- If client desires postabortion implants or IUD, provide appropriate counseling and obtain written consent before providing pain medication

Pain management:

- Provide pain medication 30 to 60 minutes before procedure

**During:**

- Explain what you are doing, step by step, as the evacuation proceeds and include explanation of any expected discomfort before it happens
- Evaluate the effect of the pain control medications and adjust as appropriate
- Use the pain management scale to determine the level of pain/discomfort
- Provide reassurance as needed, using words and touch as appropriate (such as holding the client’s hand during the procedure or have another provider assist you)
- After uterine evacuation is complete, if patient desires and has given consent, insert IUD
- Inform the client when the procedure is complete and the outcome
After:
- Explore the client’s feelings and concerns (including level of pain and discomfort) and provide explanation and support as needed
- Use the pain management scale to determine the need for further pain management
- If client desires and has given appropriate consent, provide implants

Before discharge:
During the WHO-recommended observation time of 1 to 2 hours before discharge:
- Advise the client on danger signs and the appropriate response
- Instruct client (and family if appropriate) on how to care for herself after discharge
- Discuss and provide family planning methods as desired and appropriate. Include partner in family planning counseling/discussions
- Discuss the importance of follow-up care; give appointment for next visit
- Discuss safer sex practices
- Discuss the possible psychological reactions that the woman may face, e.g., anxiety, depression and the length of time that this may be present
- Discuss sexually transmitted infections including signs, symptoms and treatment as appropriate

2 Web site: reproline.jhu.edu/English/2mnh/2pa/chptr 1.htm.


Emergency Treatment: Pain Management

Summary
While most health facilities use a general protocol for pain control medication, the service provider must be alert and respond to the individual and particular needs of each woman being treated. Pain management for postabortion care includes not only appropriate medication, but also supportive interaction and gentle performance of procedures. In addition to pain management, other medications or related interventions may be necessary during emergency treatment. This includes, for example, intravenous (IV) fluids and oxytocics.

Session Objectives
At the end of this session, participants will be able to:
1. Describe the goal of pain control
2. Describe the main counseling points to include when discussing pain management with the client
3. Describe the types of pain women may experience from incomplete abortion and from the different uterine evacuation procedures
4. List the types of pain control and available methods for each type
5. Describe symptoms of local anesthesia complications, and treatment
6. Demonstrate counseling related to pain management and integrate with care as appropriate

Pain Management for Vacuum Aspiration
There are many factors that influence how a person perceives and expresses pain. During emergency treatment, women require pain management for procedures such as vacuum aspiration and sharp curettage. The goal of pain management is to help ensure that the woman experiences minimum physical pain and anxiety with the least risk to her health by working with her to develop an individualized plan for pain management. This can be accomplished through a combination of medications, along with emotional and verbal support and clinical technique.

Discussing Pain Management with the Client
One of the most important factors in counseling of the PAC client is to make sure she has been given adequate information about pain management. Include basic information about the procedure such as how long it will take and the level of pain she might expect. The options will vary for each client based on several factors. For example, with vacuum aspiration, analgesics or local anesthesia with or without mild sedatives are used rather than riskier general or regional anesthetics. The main points to include in this part of the counseling and discussion include:

- Any pre-existing pain (pain present before procedure is started)
- Length of procedure (VA takes about 10–15 minutes)
Overview of how the procedure is done (you may show her samples of the instruments):

- Explain the degree of cervical dilatation if dilatation is required
- What pain medications are available and how they are administered
- Information about available pain methods, including side effects
- Anything in the client’s history or physical that may affect what method she chooses (e.g., contraindications, allergies or previous adverse reactions to medications)
- Any emotional or psychological concerns

Encourage her to ask questions or communicate related concerns

Not only might a PAC client be in physical pain, but she is likely experiencing some level of anxiety due to emotional stress, the circumstances surrounding the abortion or miscarriage, and the anticipation of the pending procedure. With this in mind, providers need to take special care to ensure:

- A quiet, non-threatening treatment or procedure room
- Pleasant, calm, attentive health workers
- Clear explanations of what is happening at each stage and openness to the client’s questions or concerns
- An efficient, well-trained team

These elements are not a substitute for pain medication, but are an integral part of pain management for every client.

Assessing the PAC Patient for Pain

Designed for children aged three years and older, the Wong-Baker Faces Pain Rating Scale offers a visual description for those who don’t have the verbal skills to explain how their symptoms make them feel.

**Figure 2.3-1: The Wong-Baker Faces Pain Rating Scale**

![Wong-Baker Faces Pain Rating Scale](image)

To use this scale, you should explain that each face shows how a person in pain is feeling. That is, a person may feel happy because he or she has no pain (hurt), or a person may feel sad because he or she has some or a lot of pain.
- **Face 0** is very happy because he or she doesn’t hurt at all.
- **Face 1** hurts just a little bit.
- **Face 2** hurts a little more.
- **Face 3** hurts even more.
- **Face 4** hurts a whole lot.
- **Face 5** hurts as much as you can imagine, although you don’t have to be crying to feel this bad.

You should point to each face using the words to describe the pain intensity. The PAC client should then choose the face that best describes how she feels. It will be important to observe your client’s face before, during and after the procedure to ensure adequate pain management.

**The Numerical Pain Scale**
Another tool that can be used to assess pain is the numerical pain scale, which allows the patient to describe the intensity of her discomfort in numbers ranging from 0 to 10 (or greater, depending on the scale). Rating the intensity of sensation is one way of helping the PAC provider to determine treatment.

**Figure 2.3-2: Numerical Pain Scale**

Numerical pain scales may include words or descriptions to better label the person’s symptoms, from feeling no pain to experiencing excruciating pain. Some researchers believe that this type of combination scale may be most sensitive to gender and ethnic differences in describing pain.

**General Requirements of Pain Control during Uterine Evacuation while a Client Is Awake**


Successful pain management for postabortion care involves not only appropriate medication, but also supportive interaction and a relaxed environment, including:

- A procedure room that is quiet and non-threatening
- Health care workers who are calm, friendly, gentle and unhurried
- Continuous attention to the client from the medical team

Regardless of the pain management tool used, it is important to assess the client’s pain both during and after the procedure to ensure adequate pain management.
■ A clear explanation of what to expect before the procedure, what is happening during the treatment and what, if any, discomfort she may expect to feel

■ A competent, efficient and well-trained team of providers who communicate well with the client

Remember that all sensations of pain are increased by fear. Constant attention and reassurance by touch (as appropriate) and words are important to help a woman cope with this aspect of the experience.

Pain management should be a part of the care for all women who require uterine evacuation for emergency treatment.

**Informed Consent**

Some pain medications (paracetamol, ibuprofen) do not require any written consent. However, consent is usually required for procedures such as sharp curettage and VA and where the types of medication used for pain management can affect the level of consciousness or alertness (e.g., narcotics or some sedatives). It is critical to obtain any consent before administering such drugs. **Should the patient desire postabortion IUD insertion or postabortion implant insertion, it is necessary to obtain the consent for IUD or implant placement BEFORE providing pain medication to ensure informed consent.**

In an emergency, informed consent may not be possible if the patient is unconscious or otherwise incapable. In such cases, depending on the local laws, consent is implied and the provider must do whatever possible to provide appropriate and urgent care, including pain control. Follow your local policies or protocols regarding informed consent.

**Types and Origin of Pain**

The two main types of pain that PAC clients will experience are deep/tense pain and cramp-like pain. Deep and tense pain results from cervical dilatation and/or stimulation. Scraping of the uterine wall, muscle spasms or movement of the uterus during the evacuation procedure produce diffuse lower abdominal pain with cramping. There are two different pathways that transmit pain from the cervix and uterus:

■ Hypo-gastric plexus—body and fundus of the uterus (L1, L2, L3, L4, T12)

■ Utero-vaginal plexus: cervix and upper vagina (S2, S3, S4)

**Types of Pain Control Medication**

■ Analgesia: eases sensation of pain (e.g., paracetamol)

■ Anesthetic: deadens all physical sensation (e.g., lignocaine)
Anxiolytic: depresses central nervous system functions, reduces anxiety and relaxes muscles (e.g., diazepam)

Effective pain control for vacuum extraction is usually some combination of drug types, along with gentle handling, reassurance and clear communication. However, in many cases of incomplete abortion where the cervix is already open, analgesics at least 30 minutes before the evacuation will be sufficient. Table 2.3-1 outlines the duration, mode and common side effects of analgesia used in VA.

### Use of Analgesia

The following treatment components of pain management for outpatient sharp curettage/VA deserve special emphasis:

- Analgesia with non-steroidal anti-inflammatory drugs, such as ibuprofen, indomethacin and naproxen, will reduce cramping and uterine pain during and after the procedure. These are given orally, are relatively inexpensive and may provide adequate analgesia for many women.\(^5,6\)

- Analgesia with narcotics, such as meperidine or fentanyl, may be given by intravenous, intramuscular or oral routes, depending on the narcotic. Doctors and assistants must know safe dose limits, duration of action and how to reverse the effects if the woman has respiratory depression. These may be given on an individualized basis when needed.\(^7,8\)

- Anxiolytics, such as diazepam or midazolam, decrease anxiety and provide amnesia, though they do not reduce actual pain. The woman’s anxiety level should be assessed, and, when needed, the dose should be individualized. Safe upper limits, interaction with narcotics and duration must be known by providers and reflected in practice.

### Table 2.3-1: Use of Analgesia in Vacuum Aspiration

<table>
<thead>
<tr>
<th>Drug Name (Generic)</th>
<th>Mode</th>
<th>Duration of Effect</th>
<th>Common Side Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pethidine</td>
<td>IV, IM or oral</td>
<td>2 hours</td>
<td>Drowsiness, light-headedness, weakness, euphoria, dry mouth</td>
</tr>
<tr>
<td>Paracetamol or Tylenol with codeine (acetaminophen with codeine)</td>
<td>oral</td>
<td>4–6 hours</td>
<td></td>
</tr>
<tr>
<td>Paracetamol (acetaminophen)</td>
<td>oral</td>
<td>Up to 4 hours</td>
<td></td>
</tr>
<tr>
<td>Diclofenac Aspergic Mefnamic acid</td>
<td>oral</td>
<td>3–6 hours</td>
<td></td>
</tr>
<tr>
<td>Motrin, Bufren (ibuprofen)</td>
<td>oral</td>
<td>Up to 5 hours</td>
<td>Possible gastro-intestinal upset</td>
</tr>
<tr>
<td>Ketamine (ketalar)</td>
<td>IV</td>
<td>10–15 min.</td>
<td>Blurred vision, confusion, drowsiness, increased or decreased blood pressure or heart rate; mental or mood changes, nausea, nightmares, vomiting</td>
</tr>
</tbody>
</table>
An example of an anxiolytic used in VA is valium (diazepam), which can be given orally or by IV. The duration of diazepam is about two hours. Whenever anxiolytics or narcotics are administered, medical back-up is required in case of any adverse reactions. Required back-up includes:

- Clinicians trained in resuscitation
- Appropriate antagonistic drugs
- Resuscitation equipment on hand:
  - Ambu bag
  - Oral airway
  - Oxygen

Complications of Narcotic Analgesics and Anxiolytics

- Respiratory depression:
  - Treatment: assisted respiration with Ambu bag and oxygen
  - Reverse pethidine or fentanyl with naloxone 0.4 mg IV
  - Reverse benzodiazepines with flumazenil 0.2 mg IV

Use of Anesthesia

The three main types of anesthesia are:

- **General**: Affects pain receptors in the brain; produces complete unconsciousness
- **Regional**: Blocks sensation from a specific point on the spine; the client is awake
- **Local**: Interrupts transmission of sensations in local tissue only; safest for MVA

Table 2.3-2: Characteristics of Anesthesia

<table>
<thead>
<tr>
<th>Type</th>
<th>Risk of Complication</th>
<th>Recovery Time</th>
<th>Possible Complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>Lower</td>
<td>Shorter</td>
<td>Drug allergy or seizure (rare), vaso-vagal reaction</td>
</tr>
<tr>
<td>Regional</td>
<td>Higher</td>
<td>Longer</td>
<td>Hypotension, cardiac arrest, central nervous system infection, spinal cord injury, drug allergy, seizure</td>
</tr>
<tr>
<td>General</td>
<td>Higher</td>
<td>Longer</td>
<td>Hypoxia, cardiac arrest, drug allergy, aspiration of drug contents</td>
</tr>
</tbody>
</table>

Complications of Local Anesthetics and Appropriate Treatment

- Allergic reaction (rare):
  - For hives or rash, give Benadryl (diphenhydramine) 25–50 mg IV.
  - For respiratory distress, give epinephrine 0.4 mg subcutaneously and support respiration.
Toxic reaction (rare):

- Avoid by using the smallest effective dose, aspirating before each injection.
- For mild reactions, give verbal support and monitor closely for a few minutes.
- For severe reactions, give immediate oxygen and give diazepam 5 mg IV slowly.

### Counseling and Pain Management

- Arrange the setting so it facilitates a confidential discussion.
- Ask the client if there is anyone else that she would like to have involved in the discussion (e.g., her partner, family members or a friend).
- Be sure the client understands what level of pain and discomfort to expect for the procedure she will undergo.
- Acknowledge that feeling scared, confused or worried are common emotions for most women in the same situation.
- Explain pain management options with simple terms and explanations. Include pre- and post-procedure pain control, benefits and possible side effects.
- Be sure that the client demonstrates understanding of all explanations by having her repeat or summarize the information in her own words.
- Follow local or institutional protocols for documenting informed consent for the procedure and pain control as appropriate.

### Paracervical Block

The paracervical block is a form of local anesthesia that markedly reduces pain, nausea and vomiting for PAC patients undergoing VA treatment, especially if extensive cervical dilatation is needed. While paracervical block has been recommended for use in PAC services, research indicates that it may not be indicated or effective unless cervical dilatation is required.\(^\text{10}\) Correct infiltration technique and adherence to maximum limits of drugs are necessary for safe use.\(^\text{11,12}\) The medication is injected directly into the tissues surrounding the cervix and may be effective for as long as 60–90 minutes, depending on the anesthetic used. There is reason to question the need for a paracervical block if the cervix is open with an incomplete abortion.*

#### Precautions

- Make sure there are no known allergies to lignocaine or related drugs.
- Do not inject into a vessel.
- Maternal complications are rare but may include hematoma.

* A number of studies found no benefit of a paracervical block for pain management in treatment of incomplete abortion.\(^\text{13}\)
Table 2.3-3: Characteristics of Xylocaine and Nesacaine

<table>
<thead>
<tr>
<th></th>
<th>Xylocaine (Lidocaine)</th>
<th>Nesacaine (Chloroprocaine)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Duration</strong></td>
<td>60–90 minutes</td>
<td>30–45 minutes</td>
</tr>
<tr>
<td><strong>Advantages</strong></td>
<td>Rare allergic reactions</td>
<td>Less toxic due to rapid breakdown</td>
</tr>
<tr>
<td><strong>Disadvantages</strong></td>
<td>More toxic due to slow breakdown</td>
<td>More allergic reactions, more costly</td>
</tr>
<tr>
<td><strong>Side effects</strong></td>
<td>Buzzing in ears, numbness of mouth, tongue, metallic taste</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2.3-4: Anesthetics for Paracervical Block


How to Perform a Paracervical Block

Use a 3.5 cm, 22-gauge or 25-gauge spinal needle or needle extender with 10 cc syringe to inject the lignocaine solution.

If using a tenaculum to grasp the cervix, first inject 1 ml of 0.5% lignocaine solution into the anterior or posterior lip of the cervix, which has been exposed by the speculum (the 10 o’clock or 12 o’clock position is usually used).

*Note:* With incomplete abortion, a ring (sponge) forceps is preferable as it is less likely than the tenaculum to tear the cervix with traction and does not require the use of lignocaine for placement.

With the tenaculum or ring forceps on the cervix vertically (one tooth in the external os, the other on the face of the cervix), use slight traction and movement to help identify the area between the smooth cervical epithelium and the vaginal tissue. This is the site for insertion of the needle around the cervix.
Insert the needle just under the epithelium.

*Tip:* Some practitioners have suggested the following step to divert the woman’s attention from the insertion of the needle: Place the tip of the needle just over the site selected for insertion and ask the woman to cough. This will “pop” the needle just under the surface of the tissue.

*Note:* Aspirate (pull back on the plunger) to be sure that no vessel has been penetrated. If blood is returned in the syringe with aspiration, remove the needle. Recheck the position carefully and try again. Never inject if blood is aspirated. The woman can suffer convulsions and death if IV injection of lignocaine occurs.

Inject 2 ml of lignocaine solution just under the epithelium, not deeper than 3 mm, at 3, 5, 7 and 9 o’clock for a maximum dose of 16 ml. Optional injection sites are at 2 o’clock and 10 o’clock. When the injection is correctly placed, a swelling and blanching of the tissue can be noted. Anesthetize early to provide sufficient time for effect.

At the conclusion of the set of injections, wait two minutes and then pinch the cervix with forceps. If the woman feels the pinch, wait two more minutes and then retest.


12 Lazenby, G.B., Fogelson, N.S., and Aeby, T. 2009. Impact of paracervical block on postabortion pain in patients undergoing abortion under general anesthesia. Contraception 80(6): 578-582; and Renner, R.M., Jensen, J.T., Nichols, M.D., and Edelman, A. 2009. Pain control in first trimester surgical abortion. Cochrane Database of Systematic Reviews, Issue 2. Art. No.: CD006712. DOI: 10.1002/14651858.CD006712.pub2. There was no difference in pain based on observations during the treatment or as reported by women after the procedure. The injection of local analgesia is painful, and if it does not provide pain relief in evacuation of an incomplete abortion with an open cervix, its use may be questioned in such cases.

PAC Core Component One—Emergency Treatment: Uterine Evacuation: Dilatation and Curettage

Summary
This session presents an overview and description of the dilatation and curettage (D&C) (also called sharp curettage) procedure for uterine evacuation. Each step of the procedure is outlined with illustrations for the main steps. Always follow local guidelines or protocols for the procedure, including anesthesia or related care.

Session Objectives
At the end of this session, participants will be able to:
1. Identify the instruments used for D&C or sharp curettage procedures
2. Explain the procedure for D&C and sharp curettage and demonstrate it on a model
3. Describe the post-procedure care

Sharp Curettage
While sharp curettage (SC) is an effective method for the treatment of incomplete abortion,¹ WHO recommends that it be used only when vacuum aspiration (VA) is not available; WHO recommends VA for incomplete abortion before 12 weeks gestation.² However, many low-resource countries still rely on sharp curettage for treating incomplete abortion. Some countries may experience difficulty in obtaining and maintaining VA supplies and equipment; there may be provider resistance to switching from sharp curettage to VA; providers may not have received training in VA (MVA, EVA and FSE); and some women are outside of the established criteria for VA use.

When vacuum aspiration is not available, PAC programs should therefore aim to improve the quality of postabortion care services and ensure the delivery of the complete package of PAC services regardless of whether a woman is treated with VA or with sharp curettage. To ensure high-quality sharp curettage care (when VA is not available), periodic updating of skills would, whenever possible, be desirable, as with any other surgical intervention. Sharp curettage can be performed more safely with systemic analgesia rather than general anesthesia.³ Providing family planning counseling and services to women who have had sharp curettage procedures for emergency treatment will increase the number of women leaving the clinical facility with a family planning method, thereby potentially decreasing the incidence of unplanned pregnancy that may result in repeat abortion.

The following is a summary of the sharp curettage and D&C procedures. Refer to appropriate medical texts or training material for background and supporting information needed to safely perform the procedure. And, as always, comply with local guidelines, protocols and practice standards related to the performance of D&C, including anesthesia and related care.
Basic Principles of Sharp Curettage

**Interactive Presentation/Demonstration**
- Explain how a cannula or curette is inserted through the cervix to evacuate the contents of the uterus in the case of an incomplete abortion. This is done by scraping the walls of the uterus to remove any remaining products of conception (POC).
- Demonstrate how the uterus is evacuated with sharp curettage or D&C using the instruments and the steps outlined below.

**Instruments and Supplies for Sharp Curettage**
- Sterile equipment:
  - Retractor or speculum
  - Single-toothed tenaculum or vulsellum
  - Graduated dilators
  - Uterine sound
  - Curette or ring forceps
- Local anesthesia
- Antiseptic solution (e.g., Betadine)
- Sterile gloves and infection prevention supplies/equipment

**Steps for Sharp Curettage**


The following are the steps in performing the procedure for uterine evacuation. Adapt the steps to comply with any local or national protocols. Sharp curettage should be performed only by qualified personnel as defined by local policies.

1. Review for indications:
   - Inevitable or incomplete abortion
   - VA not available for incomplete abortion up to 12 weeks gestation
   - Incomplete abortion >12 weeks gestation
2. Assess and make a treatment plan:
   - Greet and assess client.
   - Confirm the diagnosis and note any additional complications, if any.
If necessary, stabilize the client and begin treatment of complications.

Assess pain management needs, based on current discomfort, level of anxiety, history of pain tolerance and likely discomfort of anticipated procedure.

Discuss analgesia/anesthesia options with the woman and her partner/family (if desired).

Be sure to obtain any required informed consent before any medication or anesthesia is administered.

3. As with any PAC client, provide counseling, emotional support and encouragement throughout the procedure.

Discuss family planning options—including if the client chooses the IUD or implants and meets the medical eligibility criteria (MEC) for IUD or implants. The IUD can be placed immediately after the uterus has been evacuated. Implants can be inserted prior to discharge from the facility.

Obtain any required consents:

- Informed consent including counseling and information on the procedure, pain control and what to expect.
- Consent for IUD if postabortion IUD is desired and the client meets the medical eligibility criteria.
- Consent for implants if postabortion implant insertion is desired and the client meets the medical eligibility criteria.

Provide counseling as appropriate. (See Module 2, Session 2, “Counseling before, during and after Uterine Evacuation,” for a counseling checklist.)

4. Organize the procedure area for sharp curettage:

Establish sterile field.

Organize instruments and equipment:

- Forceps, speculum, tenaculum, sound, dilators, curettes of varying sizes if available
- Other instruments according to anticipated need (e.g., for repair of cervical lacerations)

5. Prepare patient for procedure:

Have her empty her bladder and clean perineum if able to do so.

Give any prophylactic antibiotics (according to local protocol).

Assist into lithotomy position.

6. Perform a bimanual pelvic examination to assess the size and position of the uterus and the condition of the fornices.

7. Administer any parenteral analgesia/anesthesia:

Give pethidine IM or IV for pain management. If available and needed, use a paracervical block.
Module 2 Session 4

- Administer oxytocin 10 units IM or ergometrine 0.2 mg before the procedure to make the myometrium firmer and reduce the risk of perforation.

8. Prepare the surgical team:
   - Scrub and apply appropriate attire and gloves.
   - Identify roles, including client monitor and circulator for vital signs.


10. Gently insert a sterile (or high-level disinfected) speculum or retractor into the vagina.

11. Apply antiseptic solution to the vagina and cervix (especially the os).

12. Check the cervix for tears or protruding products of conception. If POC are present in the vagina or cervix, remove them, using a ring or sponge forceps.

13. Conduct careful, gentle uterine evacuation:
   - Gently grasp the anterior lip of the cervix with a tenaculum or forceps to straighten the uterine cavity.
   - If using a tenaculum to grasp the cervix, first inject 1 ml of 0.5% lignocaine solution into the anterior or posterior lip of the cervix, which has been exposed by the speculum (the 10 or 12 o’clock position is usually used).
   - Gently pass a uterine sound through the cervix to assess the length and direction of the uterus; compare with previous size estimate.
   - Dilate cervix (as needed) to introduce curette.
   - Dilatation is needed only in cases of missed abortion or when some retained POC have remained in the uterus for several days:
     - Gently introduce the widest gauge cannula or curette.
     - Use graduated dilators only if the cannula or curette will not pass. Begin with the smallest dilator and end with the largest dilator that ensures adequate dilatation (usually 10–12 mm).
     - Take care not to tear the cervix or to create a false opening.
   - Curette all quadrants of the uterine cavity until there are signs of completion:
     - Contraction of the uterus
     - Gritty sensation throughout the cavity
     - No more return of retained tissue
   - Quickly assess tissue for completeness and consistency with diagnosis:
     - If complete, assess bleeding and remove any remaining instruments from the patient and make her comfortable.
- Transfer the patient to a comfortable, monitored recovery area when she is stable.
- When the patient is fully awake and alert, inform her of the findings and implications for continued treatment.
- Continue treatment and monitoring as appropriate to her condition.

14. Provide counseling, including family planning, birth spacing, discharge instructions and any other appropriate counseling prior to discharge and follow-up care.

Be careful! The uterus is very soft during pregnancy and can be easily injured during this procedure.

Figure 2.4-2: Inserting the Retractor and Holding the Anterior Lip of the Cervix

Figure 2.4-3: Dilating the Cervix
Post-Procedure Care


- Give paracetamol 500 mg by mouth as needed.
- Take vital signs and check for vaginal bleeding every 15 minutes x 1 hour before discharge from the facility.
- Encourage woman to eat, drink and walk about as she wishes.
- Offer other health services, as available and appropriate, including tetanus or malaria prophylaxis.
- Provide counseling and emotional support as appropriate, including information on postabortion psychological sequelae.
- Inform the client that she should not have intercourse or put anything into the vagina (no tampons, no douching) until after the bleeding stops (usually within five to seven days).
- Provide family planning counseling and the method of client’s choice (as appropriate) before discharge:
  - If full family planning services are not offered at the site of emergency treatment, provide information and referral.
  - Include counseling on return to fertility and birth spacing, especially for those clients who desire future pregnancies (see Module 3, Session 1):
    - Emphasize that return to fertility could be as soon as two weeks.
  - For other counseling topics, see “Counseling before, during and after Uterine Evacuation” (Module 2, Session 2).
- With the client’s permission, include her partner in the counseling discussions:

Counseling Is Critical throughout All PAC-Related Care.

See section on “Counseling before, during and after Uterine Evacuation” in Module 2, Session 2.
Many women want their partners to be informed about their condition, treatment, follow-up care and family planning. Men also desire to understand more about emergency treatment.

- Discharge uncomplicated cases in one to two hours.
- Provide post-procedure counseling, including watching for signs and symptoms requiring immediate attention, such as:
  - Prolonged cramping
  - Prolonged bleeding
  - Bleeding more than normal menstrual bleeding
  - Severe or increased pain
  - Fever, chills or malaise
  - Fainting

**Note:** In PAC programs, it has been observed that sharp curettage clients often do not receive family planning counseling as a part of emergency treatment. It is vital that family planning be integral to all PAC services regardless of treatment mode.


Emergency Treatment—
Uterine Evacuation: Vacuum Aspiration

Summary
In the first part of this session, participants become familiar with various vacuum aspiration (VA) procedures (electric, manual and foot pump) and VA equipment and learn how it works. This review provides an introduction to performing the procedure, which is outlined step by step. A section on recognizing and solving problems that may arise during the procedure completes this session.

Session Objectives
At the end of this session, participants will be able to:

1. Identify the parts of MVA equipment and select correct syringe and cannula size
2. If using electric vacuum (EVA) or foot pump vacuum for PAC services:
   a. Identify the parts of the electric vacuum aspirator (EVA) or foot pump suction evacuation (FSE) equipment, and
   b. Select the correct cannula size
3. Demonstrate the ability to check, assemble and prepare MVA, EVA and FSE equipment
4. Perform the VA procedure (MVA, EVA or foot pump) according to the steps outlined
5. Demonstrate appropriate counseling before, during and after the evacuation procedure
6. Recognize and solve technical or procedural problems during the procedure
7. Record complete, accurate case information in client charts, logbooks and other forms as needed

A Word about MVA Instruments
In 2001, EngenderHealth and the Program for Appropriate Technology in Health (PATH) conducted the first-ever comparative evaluation of MVA instruments, testing the durability, quality, safety and usability of all instruments available at that time.

- Some of the findings included:
  - Both boiling and steam sterilization techniques seemed to cause moderate to significant changes in quality and durability.
  - Assembly and disassembly of all single-valve instruments and disassembly of double-valve instruments were difficult for most users.
  - Use of bleach and glutaraldehyde did not cause significant cannula change (e.g., loss or alteration of depth or size markings).
“... No single brand of MVA instruments is perfectly suited to every setting, and no single element of the instruments unequivocally identifies one brand as superior to another. However, it is evident that certain instruments do not meet minimum safety, functionality and durability standards. Moreover ... while the lowest-cost MVA instruments may appear most appealing ... these products may not necessarily be the safest or most cost-effective, due to their decreasing safety, functionality or effectiveness over time. Accordingly, some products that cost more at the outset may in fact prove less expensive over the long term.”

Since the completion of the study, the MVA EasyGrip® cannula and the MVA Plus® syringe have been made available. These instruments have fewer parts, may be autoclavable, have less difficulty with disassembly, and are compatible with other syringes and cannulae.

Types of Vacuum Aspiration

Manual vacuum aspiration uses a specially designed, hand-held vacuum syringe with a flexible plastic cannula to apply suction in order to remove the products of conception (POC) from the uterus. This method does not require electricity.

Vacuum syringes and flexible cannulae

Note: MVA is not the ideal procedure for evacuating the uterus in molar pregnancies:

- The amount of tissue in such cases is often copious.
- Refer the patient with suspected molar pregnancy to a higher level of care.

Foot pump suction evacuation (FSE) involves use of a foot pump suction evacuator with a flexible plastic cannula to obtain vacuum and perform the evacuation procedure, using either intermittent or continuous suction. This method also does not require electricity.
Electric vacuum aspiration (EVA) uses an electric pump and metal or plastic cannulae to evacuate the uterus by providing either intermittent or continuous suctioning. The cannula is inserted into the uterus and then attached by a tube to the machine. Once the machine is turned on, the cannula is moved around gently until all of the tissue of the products of conception is removed.

Manual Vacuum Aspiration

Basic Principles of MVA

- Interactive presentation/demonstration:

1. Explain how a cannula is inserted through the cervix and attached to the vacuum syringe. When the valve is released, the contents of the uterus are emptied by suction into the syringe. The cannula reaches into the uterus; the syringe aspirates.

2. Demonstrate the vacuum action of the MVA syringe by aspirating a glass of liquid into the cannula (tea or colored water may be more visible if available). Be sure to point out that the contents of the uterus do not get aspirated quite as quickly as the glass of liquid!

Address Key Aspects of Mechanism

1. It does not require electricity.

2. It is portable.

3. Syringe holds 60 cc of aspirate fluid and tissue.\(^2\)

4. Single-valve, double-valve and the MVA Plus syringes are compatible with other cannulae.\(^3\)

5. Varied levels of force will be needed to create a vacuum suction depending on the type of syringe used.

Address Key Aspects of Cleaning and Disinfection as per the Practical Guide for Selection of MVA Instruments\(^4\):

1. Both boiling and steam-sterilization techniques seemed to cause moderate to significant changes in quality and durability.

2. Use of bleach and glutaraldehyde did not cause significant cannula changes (e.g., loss or alteration of depth or size markings).

3. Soft brushes are more appropriate for cleaning syringes and cannulae than metal brushes or hard substances.
MVA Instrument Parts Exercise

Divide trainees into groups of three or four. Give each group a set of instruments, a glass of water, an empty cup or container and a set of parts labels (e.g., barrel, cannula, plunger, electric vacuum equipment, foot pump suction equipment, etc.).

- Each person in the group should practice disassembling and reassembling the instruments. The group should match each part to the labels provided.
- Then each person in each group should practice charging the syringe (i.e., creating the vacuum) and aspirating the liquid, then emptying the syringe back into another container.
- The trainer circulates around the class to provide assistance, if needed, and to verify correct labeling of parts.

Single-Valve MVA Instrument Labels

Participants should also identify all parts used for electric vacuum aspirators and foot pump suction machines if these will be used in their programs.

Pre-Procedure Care

Before you begin the evacuation procedure, review what has been done to this point. The list can also be used as a guide or checklist before starting the procedure.
Perform a rapid assessment:
- Complications either ruled out or treated and client is stable.

Obtain client history.

Conduct a physical and pelvic exam (including assessment of uterine size).

Rule out contraindications to MVA.

Review precautions, where appropriate.

Tell the client what is happening (and what to expect) during the procedure.

Discuss pain management with the client.

Discuss family planning options—including if the client chooses the IUD or implants and meets the medical eligibility criteria (MEC) for IUD or implants. The IUD can be placed immediately after the uterus has been evacuated. Implants can be inserted prior to discharge from the facility.

Obtain any required consents:
- Informed consent including counseling and information on the procedure, pain control and what to expect.
- Consent for IUD if postabortion IUD is desired and the client meets the medical eligibility criteria.
- Consent for implants if postabortion implant insertion is desired and the client meets the medical eligibility criteria.

Provide counseling as appropriate. (See Module 2, Session 2, “Counseling before, during and after Uterine Evacuation,” for a counseling checklist.)

Have the client empty her bladder.

Position and drape the client in lithotomy position.

Administer pain control 15–30 minutes before the procedure, depending on type of pain medication being used.

Ensure that:
- All emergency drugs/equipment are available.
- Emergency backup is available.
- Sterilized/high-level disinfected instruments are ready.
- Family planning/birth spacing methods are available in the treatment room.
- Implement infection prevention measures.
- If possible, have a support person available to provide emotional support during the procedure.
Preparing VA Instruments
Be sure to follow these steps to prepare vacuum aspiration instruments for the procedure:

If using MVA:

1. Select cannulae:
   - Inspect cannulae for cracks or other defects; discard if there are any visible signs of weakness or wear.
   - Select cannulae according to the assessment of uterine size (weeks from last menstrual period [LMP]). It is a good idea to prepare several cannulae of different sizes for the procedure. The cannula needs to be large enough to allow passage of tissue expected (according to gestation) and fit snugly through the cervix.

2. Select syringes:
   - Select syringes and adapters, if needed. (See page 93, “Selection of Adapters.”)
   - It may be useful to prepare two syringes because the amount of blood and tissue in the uterus is difficult to predict.
   - Note that the colored dots on the cannula match the color of the appropriate adapter, if applicable.

3. Inspect syringes:
   - The syringe must be able to hold a vacuum. Discard syringes with any visible cracks or defects or those that do not hold a vacuum.

4. Attach the adapter (if required):
   - Attach to the end of the syringe or cannula. The MVA Plus syringe does not require an adapter.

5. Check the plunger and valve on the syringe:
   - The plunger should be positioned all the way into the barrel, and the pinch valve open, with the valve button out.

6. Close the pinch valve:
   - Push the button down and forward until you hear it lock into place.

7. Prepare the syringe:
   - Grasp the barrel and pull back on the plunger until the arms of the plunger snap outward.
   - Plunger arms must be fully secured over the edge of the barrel, so the plunger cannot move forward involuntarily. Incorrect positioning of the arms could allow them to slip back inside the barrel.
   - Never grasp the syringe by the plunger arms.
8. Check the syringe for vacuum tightness before use:
   - Leave the syringe for several minutes with the vacuum established. Open the pinch valve—you should hear a rush of air into the syringe, indicating that there was a vacuum in the syringe.
   - Re-establish the vacuum in the syringe for use during the procedure.

If using electric vacuum or foot pump suction:
1. Select cannulae:
   - Inspect cannulae for cracks or other defects; discard if there are any visible signs of weakness or wear.
   - Select cannulae according to the assessment of uterine size (weeks LMP). It is a good idea to prepare several cannulae of different sizes for the procedure. The cannula needs to be large enough to allow passage of tissue expected (according to gestation) and fit snugly through the cervix.
2. Check that the VA equipment creates a vacuum.

Performing the VA Procedure

STEP 1 Before You Start
Before beginning the procedure, you must have already completed the following steps:
- Drape the client in lithotomy position.
- Ensure that:
  - All emergency drugs/equipment are available.
  - Emergency back-up is available as needed.
  - Sterilized/high-level disinfected instruments are ready.
  - Family planning/birth spacing methods are available in the treatment room.
  - Pre-procedure medication is administered:
    - IV medication: 15–30 minutes before the procedure
    - Oral medication: 30–60 minutes before the procedure
- Wash hands and put on gloves.
- Do bimanual exam to determine uterine size, position and cervical dilatation. If using MVA, ensure that the uterine size is less than 12 weeks.
- Insert a vaginal speculum and visualize the cervix.
- Using the no-touch technique, apply antiseptic solution two to three times to the cervix (especially the os) and vagina using a sterile ring forceps and a cotton or gauze swab.
Check the cervix for tears or protruding products of conception (POC). If POC are present in the vagina or cervix, remove them using ring (or sponge) forceps.

Gently apply a vulsellum or single-toothed tenaculum to the anterior lip of the cervix. Ring forceps are preferable as they are less likely than the tenaculum to tear the cervix and do not require the use of lignocaine for placement.

**STEP 2 Dilate the Cervix If Indicated**

When induced abortion has occurred, the cervix is usually dilated. Cervical dilatation is usually necessary when a missed abortion has occurred or when the cervical canal will not allow passage of a cannula appropriate to the uterine size. When needed, cervical dilatation should be done gently with cannulae of increasing size, taking care not to traumatize the cervix:

- If cervical dilatation is needed, assess the need for additional pain management before proceeding. If a paracervical block is used, then give paracervical block before proceeding.

- If dilatation of the cervix is needed, begin with the smallest dilator and end with the largest dilator that ensures adequate dilatation (usually 10–12 mm). Be extremely careful not to tear the cervix or create a false opening.

**STEP 3 Insert the Cannula**

Gently introduce the appropriate suction cannula according to uterine sizing (use the largest available for that uterine size):

- While gently applying traction to the cervix, with the vulsellum (or tenaculum), use the no-touch procedure to insert the cannula through the cervix into the uterine cavity, just past the internal os. Rotating the cannula with gentle pressure often helps ease insertion.

**STEP 4 Measure the Size of the Uterus**

Slowly push the cannula into the uterine cavity until it touches the fundus, but not more than 10 cm. Note the uterine depth by dots visible on the cannula. Next, withdraw the cannula slightly.

**STEP 5 Evacuate the Uterus**

If using MVA:

- Attach the prepared syringe. Hold the vulsellum (or tenaculum) and the end of the cannula in one hand and the syringe in the other. Attach the prepared syringe to the cannula. Make sure not to push the cannula further into the uterus as you attach the syringe. Release the pinch valve(s) on the syringe to transfer the vacuum through the cannula to the uterine cavity. Evacuate remaining contents by gently rotating the syringe from side to side (i.e., 10 o’clock to 12 o’clock) and then slowly moving the cannula back and forth within the uterine cavity. Bloody tissue and bubbles should

---

**When Evacuating the Uterus, Avoid:**

- Inserting the cannula too forcefully.
- Losing the vacuum by withdrawing the cannula past the cervical os.
- Grasping the MVA syringe by the plunger arms while the vacuum is established.
begin to flow through the cannula into the syringe. Check for signs of completion that include red or pink foam; a gritty sensation as the cannula passes over the surface of the evacuated uterus; and the uterus contracting (gripping) around the cannula.

- To avoid losing vacuum, be careful not to withdraw cannula opening beyond the cervical os. If the vacuum is lost or if the syringe is more than half full, empty it and then re-establish the vacuum. Also, avoid grasping the syringe by the plunger arms while the vacuum is established and the cannula is still in place.

- Once evacuation is completed, detach the syringe (MVA) and remove the tenaculum and speculum, and place contents into a container. Withdraw the cannula and place cannula in decontamination solution.

- With the valve open, empty the contents of the MVA syringe into a strainer by pushing on the plunger. Place the empty syringe on a high-level disinfected tray or container until you are certain that the procedure is complete.

- Perform a bimanual exam to check the size and firmness of the uterus. If needed, do cervical tear repair. If patient has provided prior voluntary consent to IUD insertion, insert the IUD.

If using EVA or FSE (See manufacturer’s instructions for more information):

- Attach cannula to the suction source. Evacuate remaining contents slowly by moving the cannula back and forth within the uterine cavity. Bloody tissue and bubbles should begin to flow through the cannula into the syringe. Check for signs of completion, which include red or pink foam; a gritty sensation as the cannula passes over the surface of the evacuated uterus; and the uterus contracting (gripping) around the cannula.

- To avoid losing vacuum, be careful not to withdraw cannula opening beyond the cervical os. If the vacuum is lost, re-establish the vacuum.

- Once evacuation is completed, detach the vacuum source (EVA or FSE) and remove the tenaculum and speculum, and place contents into a container. Withdraw the cannula and place cannula in decontamination solution.

- Perform a bimanual exam to check the size and firmness of the uterus. If needed, do cervical tear repair. If patient has provided prior voluntary consent to IUD insertion, insert the IUD.

**STEP 6 Tissue Inspection**
Inspect the tissue removed from the uterus:

- For quantity and presence of POC;
- To assure complete evacuation; and
- To check for a molar pregnancy (rare).

If necessary, strain and rinse the tissue to remove excess blood clots, then place in a container of clean water, saline or weak acetic acid (vinegar) to examine. If sending tissue specimens for pathology, prepare tissue according to local laboratory requirements.
If no POC are seen:

- All of the POC may have been passed before VA was performed (complete abortion).
- The uterine cavity may appear to be empty, but may have not been emptied completely. Repeat the evacuation.
- The vaginal bleeding may have been due to something other than an incomplete abortion (such as bleeding from fibroids).
- The uterus may be abnormal, such as in a double uterus (rare).

(See page 94, “Management of Problems during the VA Procedure.”)

The absence of products of conception in a woman with symptoms of pregnancy may strongly indicate the possibility of ectopic pregnancy.

Gently insert a speculum into the vagina and examine for bleeding. If the uterus is still soft and not smaller or if there is persistent, brisk bleeding, repeat the evacuation.

Infection Prevention

- Place contaminated, disposable objects in a properly marked and leak-proof container:
  - Place sharp instruments in a separate puncture-proof container.
- Decontaminate all instruments (cannula, syringes, adapters, tenaculum, speculum, etc.) in 0.5% chlorine solution for at least 10 minutes.
- Immerses both gloved hands in decontaminated solution and remove them by turning them inside out.
- Wash hands thoroughly with soap and water.

Post–Procedure Care

- Observe the client for one to two hours.
- Give oxytocin 10 units IM or ergometrine 0.2 mg IM (if oxytocin not available and patient does not have hypertension or other contraindications to ergometrine).
- Use the pain management scale to determine the level of pain/discomfort.
- Give paracetamol 500 mg by mouth if needed.
- Take vital signs before moving the client from the procedure area.
- Encourage the woman to eat, drink and walk as she wishes if there are no problems.
- Explore the client’s feelings and concerns and provide explanation and support as needed.
- Check bleeding at least once before discharge and check to see that cramping has reduced. Prolonged cramping is not normal.
The client may be discharged as soon as she is stable, can walk without assistance and has received post-procedure counseling and family planning information and services, including when she can safely resume intercourse. In most instances, uncomplicated cases can be discharged in one to two hours.

Before the client leaves the facility:

- Include the husband/partner in counseling if the patient agrees.
- Remind patients and their partners that fertility can return as early as 11 days post-procedure.
- Explain the benefits of birth spacing for maternal and child health.
- Provide family planning counseling and assist the client in deciding on a method before she is discharged. If the patient chooses, provide a family planning method. Remember: postabortion care is not complete without family planning services!
- Advise about care at home and signs of complications that require immediate attention:
  - Prolonged cramping (more than a few days)
  - Prolonged bleeding
  - Bleeding more than a normal menstrual period
  - Severe or increased pain
  - Fever, chills
  - Fainting
- Provide other health services as needed (if available) such as tetanus prophylaxis or Rh immune globulin if client is Rh-negative.

Record information:

- Record complete information on client chart and other forms as needed.

Include appropriate counseling topics in the patient encounter:

- Information on the procedure including:
  - What will occur with a pelvic exam
  - Information on the MVA procedure
- Information on the pain management options available to the patient
- Need for informed consent before procedure is initiated
- Information on normal complications that can be expected
- Information on follow-up care at home and when to return to the facility

Selection of Adapters

If this information applies, it should be given before the procedure so that the participant has this information before practice.
Remember: The key to recognizing and managing problems during MVA is being aware that they can occur even under the best circumstances.

Table 2.5.1: Cannula, Adapter and Syringe Attributes

<table>
<thead>
<tr>
<th>Cannula Size</th>
<th>Adapter Color</th>
<th>Syringe Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>4, 5, 6 mm</td>
<td>No Adapter Needed</td>
<td>Single</td>
</tr>
<tr>
<td>4, 5, 6 mm</td>
<td>Blue</td>
<td>Double</td>
</tr>
<tr>
<td>7 mm</td>
<td>Tan</td>
<td>Double</td>
</tr>
<tr>
<td>8 mm</td>
<td>Ivory</td>
<td>Double</td>
</tr>
<tr>
<td>9 mm</td>
<td>Dark Brown</td>
<td>Double</td>
</tr>
<tr>
<td>10 mm</td>
<td>Dark Green</td>
<td>Double</td>
</tr>
<tr>
<td>12 mm</td>
<td>No Adapter Needed</td>
<td>Double</td>
</tr>
</tbody>
</table>

Table 2.5.2: Approximating Uterine Size and Selecting Cannula Size

<table>
<thead>
<tr>
<th>Approximate Uterine Size (Weeks LMP)</th>
<th>Approximate Cannula Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>5–7 LMP</td>
<td>5 mm</td>
</tr>
<tr>
<td>7–9 LMP</td>
<td>6 mm</td>
</tr>
<tr>
<td>9–12 LMP</td>
<td>7–12 mm</td>
</tr>
</tbody>
</table>

Management of Problems during the VA Procedure

Background

Several types of problems (technical and procedural) and medical complications can occur during and after completing a VA procedure. Most are not serious and if recognized immediately and corrected or treated, the client’s recovery will not be affected.

Technical Problems

MVA

In most MVA procedures, the syringe vacuum remains constant until the syringe is approximately 90% full. However, a decrease in vacuum may occur before the procedure is complete if the cannula is blocked or withdrawn prematurely.

Full Syringe

- If the syringe is full:
  - Close the pinch valve of the syringe.
  - Disconnect the syringe from the cannula, leaving the tip of the cannula in place inside the uterus. (Do not push the plunger when disconnecting the syringe.)
Empty the syringe into a container for inspection by opening the pinch valve and pushing the plunger into the barrel. (Be careful not to splash the contents of the syringe into your eyes.)

Re-establish a vacuum in the syringe, reconnect it to the cannula and resume the aspiration. (You can keep a second prepared syringe on hand during the aspiration and switch syringes if one becomes full.)

Cannula Withdrawn Prematurely—MVA, EVA and Foot Pump Vacuum
If the opening of the cannula is pulled into the vaginal canal with the valve still open, the vacuum will be lost. To correct this:

- If using MVA:
  - Remove the syringe and cannula, taking care not to contaminate the cannula through contact with the vaginal walls or other non-sterile surfaces.
  - Close the pinch valve of the syringe.
  - Detach the syringe from the cannula, empty the syringe and then re-establish the vacuum in the syringe. (See above: “Full Syringe.”)
  - Reinsert the cannula if it has not been contaminated. (If contamination has occurred, insert another sterile or high-level disinfected cannula.)
  - Reconnect the syringe, release the valve and continue aspiration.

- If using EVA or foot pump vacuum:
  - Reinsert the cannula if it has not been contaminated. (If contamination has occurred, insert another sterile or high-level disinfected cannula.)

Cannula Clogged
If no tissue or bubbles are flowing into the MVA syringe, the cannula may be clogged.

- If using MVA:
  - Close the pinch valve of the syringe.
  - Remove the syringe and the cannula, taking care not to contaminate the cannula through contact with the vaginal walls or other non-sterile surfaces.
  - Remove the material from the opening in the cannula using a sterile or high-level disinfected forceps or sponge, without contaminating the cannula. If contamination occurs, use another sterile or high-level disinfected cannula.
  - Reinsert the cannula, attach a prepared syringe and release the pinch valve.

- If using EVA or foot pump vacuum:
  - Remove the cannula, taking care not to contaminate the cannula through contact with the vaginal walls or other non-sterile surfaces.
Never try to unclog the cannula by pushing the plunger back into the barrel with the cannula tip still in the uterus.

MVA Syringe Does Not Hold Vacuum
If the MVA syringe does not seem to hold a vacuum, try lubricating the plunger and barrel with a drop of silicone. If this does not work, replace the O-ring. If the syringe still does not hold a vacuum, discard it and use another syringe.

Procedural Problems
Procedural problems occurring during an MVA procedure are infrequent. Most are not serious, are related to the inexperience of the provider and are easily corrected.

Less than Expected Tissue
- The most common procedural problem is obtaining less than expected tissue. Tissue that is inadequate in quantity or contains no definite POC may indicate:
  - All POC passed before the VA.
  - The vaginal bleeding was not due to pregnancy.
  - A possible ectopic pregnancy (see below).

Incomplete Evacuation
Using a cannula that is too small or stopping the aspiration too soon can result in retained tissue, subsequent hemorrhage, infection, and continued pain and cramping. Careful observation for the signs of completion and tissue examination to identify the POC are the best ways to ensure complete evacuation. Incomplete evacuation is treated by repeating the evacuation.

All POC Passed before the VA
Further evacuation is not necessary unless the clinical findings suggest that the evacuation is still incomplete (e.g., persistent vaginal bleeding, fever, etc.).

Uterine Perforation
Uterine perforation is rare with MVA. However, when a women who has received PAC treatment complains of severe pain, consider intra-abdominal injury (i.e., injury to the abdominal organs such as the uterus, cervix, vagina or even bowel). Other signs include abdominal distension, cervical motion tenderness, shoulder pain and rigid abdomen. See Module 2, Session 6 for other details on the management of intra-abdominal injury.
Other Problems

Vaginal Bleeding Not Due to Pregnancy

- Women of reproductive age may have irregular periods (i.e., missed or skipped periods) followed by vaginal bleeding due to:
  - Progesterone-breakthrough bleeding with use of progestin-only contraceptive methods (i.e., injectables, implants or oral contraceptive pills)
  - Uterine fibroids (benign, smooth muscle tumors that grow in the wall of the uterus)
  - Estrogen-breakthrough bleeding (anovulation)

Ectopic Pregnancy

- Delay in treatment of an ectopic pregnancy is particularly dangerous. The risk of an ectopic pregnancy is greater if the client has a history of any of the following:
  - Previous ectopic pregnancy
  - Pelvic infection
  - IUD or progestin-only contraceptive use:
    - If ectopic pregnancy is suspected, check again for signs of an ectopic pregnancy, and quickly prepare the woman for referral if surgery (minilaparotomy or laparoscopy) is not available. Rupture of an ectopic pregnancy is a real and life-threatening possibility. If this happens, death can be prevented only by stopping the hemorrhage through immediate surgical removal of the ectopic pregnancy, stopping bleeding and replacing blood lost, if required.
POSTABORTION CARE

WHO endorses the use of vacuum aspiration, which includes electrical aspiration, foot pump, and manual vacuum equipment. These three modalities create vacuum for aspiration. The only difference is the power to create the vacuum. If you are using electrical aspiration or foot pump, check the instructions for your equipment before following these procedures.

**Step 1 — Assess Client**
- Uterine size less than or equal to 12 weeks if using MVA
- Condition stable
  a. Pulse less than 110/min
  b. BP more than 90/60 Diastolic

**Step 2 — Prepare for the Procedure**
- Make sure that:
  - All emergency drugs/equipment are available
  - Emergency back-up is available
  - Sterilized/High Level Disinfected instruments are ready
  - Family planning/spacing methods are available in the treatment room

**Step 3 — Prepare the Patient**
- Make sure that pre-procedure medication is administered:
  - IV medication: 15 to 30 minutes before procedure
  - Oral medication: 30 to 60 minutes before procedure
  - Give oxytocin 10 units IM or ergonovine 0.2 mg IM 5 to 10 minutes before the procedure
  - Have patient empty her bladder and wash her perineal area
  - Wash hands properly with soap and water and put on sterilized/HLG gloves

**Step 4 — Performing the VA Procedure**
- If using Electric or Footpump suction:
  - Check that the VA equipment creates a vacuum
- If using MVA syringe:
  - Assemble the syringe
  - Close the pinch valve
  - Pull back on the plunger until the plunger arm-lock
  - Monitor vital signs and provide emotional support throughout the procedure
  - Do bimanual exam to confirm uterine size and position
  - Visualize cervix by applying Graviss’s or Cusco speculum

**Step 5 — Evacuating the Uterus**
- If using Electric or Footpump suction
  - Attach cannula to suction source
  - If using MVA syringe:
  - Release the pinch valves on the syringe,
  - Evacuate remaining contents by gently rotating the syringe from side to side (10 to 12 o’clock) and then moving the cannula gently and slowly back and forth within the uterine cavity
  - Check for signs of completion (red or pink foam, gritty sensation, uterus contracts around cannula)

**AVOID…**
- Inserting the cannula too forcefully
- Losing the vacuum, by withdrawing the cannula opening past the cervical os
- Grasping the MVA syringe by the plunger arms while the vacuum is established

**Step 6 — Tissue Inspection**
- Inspect the tissue for products of conception, complete evacuation, or molar pregnancy.
- If necessary, strain material. Foet is using plain water, saline or weak acetic acid to examine.

**Step 7 — Post Procedure Care**
- Patient:
  - Observe for 1 to 2 hours, encourage eating and drinking if no problems
  - Paracetamol 500mg by mouth if needed
  - Other health services if possible (bacterial prophyllaxis, malaria information, referral to other RH services)
  - Before discharge from the facility
  - Include husband/partner in counseling if patient agrees.
  - Remind patients and their partners that fertility can return as early as 11 days post procedure and benefits of birthspacing for maternal and child health
  - Provide family planning counseling. If patient chooses, provide a family planning method.
  - Advise about care at home and signs of complications that require immediate attention
  - Schedule for return visit as per facility policies
  - Document in patient record

- Facility:
  - Decontaminate all used instruments before removing gloves
  - Dispose of medical waste and needles properly as per facility protocol

Chart Checklist and Post-Procedure Record for Postabortion Care

Patient Name: ___________________________ Date: ______________________

PRE-PROCEDURE

- Welcome the client, make her comfortable
- Assess client to ensure:
  - vital signs do not indicate shock
  - vaginal bleeding is not excessive
  - no abdominal injury is present
- If needed, make arrangements for doctor availability for procedure or refer to higher level facility
- Ensure privacy and confidentiality
- If client consents, involve husband/support person in all counseling
- Ask/Observe/Examine
- Describe procedure
- Obtain informed consent for procedure and pain management
- If patient desires postabortion IUD or implants, counsel and obtain informed consent for the procedure
- Ensure patient gets adequate pain medication:
  - IM: 30 minutes before procedure
  - By mouth: 30 to 60 minutes before procedure
- Ensure that all equipment is ready
- If the patient's condition is stable and time permits, do counseling on FP methods and have patient decide which FP method to use, particularly important if patient desires IUD

DURING PROCEDURE

- Ensure privacy
- Have assistant monitor vital signs and provide verbal support. Delay FP counseling until procedure is completed
- Monitor client closely for pain, use additional pain medication if needed and it is safe for the patient
- Reassure patient during the procedure
- Follow all infection prevention procedures
- Inspect tissue to ensure that procedure is complete

POST-PROCEDURE

- Observe client for 1 to 2 hours; check vital signs and vaginal bleeding every 30 minutes
- Provide pain medication if cramping present
- Continue to ensure privacy and confidentiality
- If patient agrees, include husband/family member/friend when giving instructions/counseling including:
  - Rest
  - Nothing in vagina and no sex until vaginal bleeding has ended x 2 days
  - Take and complete medicines given by provider
  - Watch for warning signs that indicate the need for medical attention, including:
    - Severe abdominal pain
    - Fever
    - Bleeding heavier than a normal period
    - Foul odor from vagina
    - Bleeding that lasts more than two weeks
POST-PROCEDURE (continued)

- Counsel patient to avoid becoming pregnant for six months. This provides her body a rest and helps in promoting a healthier next pregnancy.
- Do family planning counseling and help her select a FP method before discharge if she desires a method. Remember that postabortion care has not been completed until FP counseling and an opportunity to choose a FP method has been provided!
- Discharge client after 1 to 2 hours if she is comfortable, stable, able to walk without assistance
- If FP method not selected, schedule return visit for FP method in two weeks
  - Provide condoms to use until patient decides on a FP method
- Counsel patient, as needed, for:
  - Malaria prophylaxis
  - Tetanus prophylaxis
  - HIV counseling and testing
  - STI evaluation
- Record all findings in client record. Complete PAC register

POST-PROCEDURE OBSERVATION

Observe for 1 to 2 hours. Assess the patient every 15-30 minutes.

<table>
<thead>
<tr>
<th>Vital Signs</th>
<th>Date</th>
<th>Time</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP</td>
<td>11/7/07</td>
<td>6:00 p.m.</td>
<td></td>
</tr>
<tr>
<td>Pulse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respiration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temp</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uterus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boggy or soft</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaginal Bleeding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments: _____________________________________________________________

FP Counseling completed? YES ____ NO ____
FP method chosen: ________________________________________________
Referral done? YES ____ NO ____
Referred to what facility? __________________________________________
Name: ____________________________
Date: ____________________________
Signature: _______________________

Adapted from: K4Health Project. At: http://info.k4health.org/pac/materials/Chart_Checklist.pdf.
Remember:

- You have the right to ask for and receive information from health workers.
- You can become pregnant again BEFORE your next monthly bleeding. Use a family planning method immediately or when you decide to have sex.
- After a miscarriage or abortion, you should wait six months before becoming pregnant again to reduce health problems for the mother and baby in the next pregnancy.
- You should return to the clinic immediately if you have severe bleeding, fever, bad smelling discharge from your vagina, severe stomach pains, or don’t feel well.
- Condoms will protect you from pregnancy and sexually transmitted infections, including HIV.

When a pregnancy ends, you need to take care of yourself.

If you have one or more of the following symptoms, you must return to the clinic:

- Heavier bleeding than your normal monthly bleeding
- Fever
- Dizziness or fainting
- Severe stomach pains
- Bad smelling discharge from your vagina

The end of a pregnancy can affect you physically and emotionally. To get better, it's important to:

- Get support from health providers in the clinic.
- Get support from your partner, your family, or people close to you.
- Rest, and eat well. Eat everything that you are used to and drink plenty of liquids.
- Wash or bathe with soap and water every day.
- Use only the medicines that were prescribed until you have finished your treatment.
- Do not put anything in your vagina for one week, including tampons, tissue, or rags.

You can get pregnant again BEFORE your next monthly bleeding. Health providers can help you and your partner choose a family planning method to prevent another pregnancy and answer your questions.

You can start sexual relations two to three days after you stop bleeding and when you feel comfortable.

After an abortion or miscarriage, wait six months before becoming pregnant again. This will reduce health problems for the mother and baby in the next pregnancy. (2006 WHO Policy brief)

- **IUD**
  - This is a small device that is placed inside your uterus. It offers up to 12 years of protection and can be removed by a health worker at any time.

- **Injectables**
  - These are injections that you receive once every 2 or 3 months. The time depends on the type of injection you choose.

- **Implants**
  - These are small plastic rods or capsules that are placed under the skin in your arm. They offer 3-7 years of protection depending on the type you choose.

- **Pills**
  - These are tablets that you take every day at the same time. If you forget to take the pills, you may become pregnant.

- **Tubal Ligation or Vasectomy**
  - These are permanent methods for women and men who have the number of children they want. The surgery can take place any time you and your partner decide.

- **Condoms**
  - Condoms can prevent pregnancy and sexually transmitted infections, including HIV. A new condom should be used every time you have sexual relations.

- **Spermicides**
  - These are foam, creams, jellies, or tablets that you place inside your vagina before having sexual relations.

- **Standard Days Method**
  - To use this method, you learn the fertile days of your menstrual cycle. You must avoid sexual relations or use condoms on days when pregnancy is possible.
No-valve syringes are not recommended due to increased risk of uterine perforation with their use.


Ibid.

Ibid.


Emergency Treatment: 
Postabortion Complications and Management

Summary
Any woman with an incomplete abortion may experience one or more life-threatening complications. Health care providers must recognize these complications and initiate immediate treatment to save the woman’s life. This session covers an overview of the major postabortion complications of shock, severe vaginal bleeding, intra-abdominal injury and sepsis, as well as the detailed management of each.

Session Objectives
At the end of this session, participants will be able to:
1. Identify possible complications and their signs/symptoms
2. Describe initial treatment and other measures for:
   a. Shock
   b. Severe vaginal bleeding
   c. Infection and sepsis
   d. Intra-abdominal injury
   e. Uterine perforation
3. Explain elements of emergency resuscitation/preparation for referral and transport to tertiary care hospital

Common Postabortion Complications
Regardless of the type of abortion, complications can develop at any time, even before the woman seeks care. If prompt actions are not taken, complications can become life-threatening within minutes. Thus when a woman presents for care, the provider must be able to both recognize and manage complications. Initiating treatment for life-threatening conditions immediately is essential to keep the woman’s condition from worsening.

Presenting complications of PAC clients may include:
■ Shock
■ Severe vaginal bleeding
■ Infection and sepsis
■ Intra-abdominal injury
■ Uterine perforation
Shock

Shock is a life-threatening condition that requires immediate and intensive treatment to save the client’s life. It is characterized by failure of the circulatory system to maintain adequate blood flow to vital organs, depriving them of oxygen. With incomplete abortion, shock is usually caused by blood loss (hemorrhage) and/or dilation of the blood vessels (vasodilation) from infection/sepsis or trauma.

Clients suffering from shock must be treated immediately and closely monitored because their condition can worsen quickly. The primary goal in treating shock is to stabilize the client; that is, to restore the volume and efficiency of the circulatory system as measured by an increase in blood pressure and decrease in the pulse and respiratory rates.

While the immediate and intensive treatment of shock is essential to save to the woman’s life, it is only the first step. The underlying cause must also be detected and treated immediately to prevent the woman’s condition from worsening.

Signs and Symptoms of Shock

The signs and systems of shock include:

- Fast, weak pulse (rate ≥110 per minute)
- Low blood pressure (systolic <90)
- Pallor (especially of inner eyelid, palms or around the mouth)
- Sweatiness or cold, clammy skin
- Rapid breathing (respirations ≥30 per minute)
- Anxiousness, confusion or unconsciousness
- Scanty urine output (<30 ml per hour)

Initial Treatment for Shock

Guidelines for the initial treatment of shock include:

- Call for help; you will need others to help you urgently manage this patient.
- Monitor vital signs (e.g., pulse, blood pressure, respiration, temperature) every 15 minutes.
- Turn the client onto her side to minimize the risk of aspiration if she vomits.
- Make sure her airway is open.
- Give oxygen at 6–8 liters per minute (mask or cannula).
- Keep the client warm (do not overheat).
- Elevate legs to increase return of blood to heart:
  - Put blankets or pillows under the patient’s feet.
  - If possible, raise the bed by putting a block under the foot of the bed.
NOTE: At this point, if IV fluids and other medications are not available, make arrangements to transfer the patient immediately to a center where they are. Do not give fluids or medications orally.

- Give IV fluids (normal saline or Ringer’s lactate), 1 liter in 15–20 minutes using a large-bore needle (16–18 gauge):
  - Give at least 2 liters in the first hour, which is over and above fluid replacement for ongoing losses. A client may need up to 3 liters if she has lost a lot of blood.
  - Note: A more rapid replacement is required in the management of shock resulting from bleeding. Replace two to three times the estimated fluid loss.
  - Do not give fluids by mouth.
- Monitor vital signs, IV fluids and urine output. An hourly output of less than 50 ml is suggestive of decreased circulatory fluid volume and may indicate acute renal failure.
- Collect blood for hemoglobin or hematocrit—a hemoglobin of 5 g/100 ml or less or hematocrit of 15% or less is life-threatening and will require blood transfusion.
- Immediately cross-match blood and perform a bedside clotting test.
- If possible, obtain blood cultures if there is any sign of infection or sepsis (e.g., fever, foul-smelling vaginal discharge) and give broad-spectrum IV or IM antibiotics.

Do not give antibiotics by mouth to a person in shock. Refer individual if IV/IM antibiotics are not available.

- Remove any visible products of conception (POC) to help the uterus to contract and control bleeding. Be careful to maintain aseptic technique, and do not do a complete pelvic exam at this time.
- If the woman’s condition improves (i.e., stabilizing pulse, increasing blood pressure, improving mental status, increasing urine output), adjust the rate of the IV infusion to 1 liter in six hours and continue managing the underlying cause of shock.

Definitive Management of Shock
Once the patient is stabilized, promptly determine and treat the underlying cause of her shock while continuing to check her vital signs, urine output and IV fluids closely.

- If heavy bleeding is suspected as the cause:
  - Empty the uterine cavity of any retained POC.
  - Transfuse as soon as possible.
  - Reassess her condition for improvement.
- If infection is suspected as the cause:
Collect appropriate blood and other samples before beginning antibiotics.

Give a combination of antibiotics to cover aerobic and anaerobic infections and continue until she is fever-free for 48 hours.

Reassess her condition for improvement.

If trauma is suspected as the cause, prepare for surgical intervention.

**Severe Vaginal Bleeding**

When a woman has prolonged or excessive vaginal bleeding and symptoms of incomplete abortion, the bleeding usually is caused by retained POC or by injury to the vagina, cervix or uterus, including perforation of the uterus. These injuries usually mean that there has been an attempt to terminate the pregnancy. Therefore, she may have an infection (from unsafe methods or contaminated instruments) and may need antibiotics. Taking prompt action to stop the bleeding and replace fluid or blood volume can be lifesaving. The blood pressure and heart rate should also be closely monitored, as shock may develop at any time.

Blood pressure, pulse rate, hematocrit or hemoglobin, and urine output are the primary measures of the amount of blood loss. Treatment includes control of bleeding, intravenous fluids (when available) to replace fluid volume, antibiotics to fight infection, and stabilization before uterine evacuation can occur. Surgery may sometimes be required to identify and repair the source of bleeding. In this case, refer the client to a higher level of care as soon as she is stable.

**Signs of Severe Vaginal Bleeding**

The following signs are seen with severe vaginal bleeding:

- Heavy, bright red vaginal bleeding with or without clots
- Blood-soaked pads, towels or clothing
- Pallor (conjunctiva and around the mouth or palms)
- Dizziness, fainting

**Initial Treatment of Severe Vaginal Bleeding**

Guidelines for the initial treatment of severe vaginal bleeding include:

- Check vital signs.
- Elevate the legs or, if possible, raise the foot of the bed.
- Make sure that the airway is open.
- If available, start oxygen at 6–8 liters per minute by mask or nasal cannula.
- Restore fluid volume:
  - Start IV with a large-bore needle or catheter (16-gauge or higher).
  - IV fluids: Give normal saline or Ringer’s lactate, 1 liter in 15–20 minutes; give 2 liters in the first hour. A client may need up to 3 liters if she has lost a lot of blood.
Monitor amount of blood loss:
- Heart rate
- Blood pressure
- Hematocrit (if lab available)
- Number of pads soaked or amount of blood on sheets, mattress, clothing, etc.

Monitor vital signs, IV fluids and urine output. An hourly output of less than 50 ml is suggestive of decreased circulatory fluid volume and may indicate acute renal failure.

Collect blood for hemoglobin or hematocrit—a hemoglobin of 5 g/100 ml or less or hematocrit of 15% or less is life-threatening and will require blood transfusion.

Immediately cross-match blood and perform a bedside clotting test (if lab facilities are available).

If possible, obtain blood cultures if there is any sign of infection or sepsis (e.g., fever, foul-smelling vaginal discharge) and give broad-spectrum IV or IM antibiotics. **Do not give oral antibiotics.**

If the woman may have been exposed to tetanus and her vaccination history is uncertain, give her tetanus toxoid.

Give IM or IV analgesia for pain management.

**Definitive Management of Severe Vaginal Bleeding**
Once the initial treatment has started and the client is stable, prompt treatment of the underlying cause of bleeding is necessary. There may be one or more causes of bleeding that will need to be treated, as follows:

1. If there are signs of intra-abdominal injury or ectopic pregnancy, complete further assessment and appropriate treatment immediately.

2. If there are any visible cervical or genital tract lacerations, suture promptly.

3. Treat the incomplete abortion by uterine evacuation.

4. If there are signs of uterine perforation during uterine evacuation, follow the steps for treating this condition. (See page 115, “Treatment during uterine evacuation.”)

If the client is bleeding from several places and the bleeding does not stop easily after initial steps, she may have a serious condition called disseminated intravascular coagulation (DIC) and will need to be referred immediately. (See page 112, “Disseminated Intravascular Coagulation.”)
Infection or Sepsis
Infection is a common complication of incomplete abortion. The presence of POC makes it easy for infections to grow, especially when they result from an unsafe abortion that used unsafe methods or contaminated instruments. Localized infections from induced or spontaneous abortion can rapidly lead to more generalized sepsis and septic shock, which can be fatal.

Signs and Symptoms of Infection or Sepsis
The following are signs and symptoms of infection or sepsis:

- Chills, fever, sweats, general discomfort (flu-like symptoms)
- Foul-smelling vaginal discharge
- Lower abdominal pain/tenderness (with or without rebound tenderness)
- Mucopus from the cervix
- Excessive pain or cervical motion tenderness on bimanual examination
- Distended abdomen
- History of attempting to end the pregnancy or history of recent miscarriage
- Prolonged bleeding (more than eight days)

If infection is suspected, it is important to assess the woman’s risk for developing septic shock. The following table compares the indications of low and high risk.

<table>
<thead>
<tr>
<th></th>
<th>Low Risk</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low fever</td>
<td></td>
<td>High fever (&gt;40°C) or subnormal temperature (&lt;36.5°C)</td>
</tr>
<tr>
<td>First trimester abortion</td>
<td></td>
<td>Second trimester abortion</td>
</tr>
<tr>
<td>No evidence of intra-abdominal injury</td>
<td></td>
<td>Any evidence of intra-abdominal injury</td>
</tr>
<tr>
<td>Stable vital signs</td>
<td></td>
<td>Any evidence of shock (falling blood pressure and rising pulse rate)</td>
</tr>
</tbody>
</table>


Initial Treatment of Infection or Sepsis
If the infection is localized or the risk of septic shock is low, the complication can usually be managed by immediate broad-spectrum antibiotics (IV or IM) that are effective against Gram-negative, Gram-positive, anaerobic organisms and chlamydia.

If the infection is more generalized or if the risk of septic shock is high, then immediate additional treatment is needed to save the woman’s life.
This additional treatment may include the following:

- Check vital signs.
- Do not give anything by mouth as surgery may be needed (unless there is no IV access and it is the only alternative).
- Make sure that the airway is open. If she is unstable, give oxygen 6–8 liters/minute by cannula or mask.
- Start IV broad-spectrum antibiotics immediately. (If blood cultures are available, take cultures before beginning antibiotics.)
- If the woman has been exposed to tetanus (or if she has had an unsafe abortion) and her vaccination history is uncertain, give her tetanus toxoid.
- If she becomes unstable, give IV fluids (normal saline or Ringer’s lactate), 1 liter in 15–20 minutes or faster. She may require rapid administration of several liters to restore fluid balance.
- If the woman has lost a lot of blood or appears anemic, check her hemoglobin or hematocrit. Also cross-match and perform a clotting test, if available. A hemoglobin of 5 g/100 ml or less or hematocrit of 15% or less is life-threatening and will require blood transfusion.
- Monitor vital signs, IV fluids and urine output. An hourly output of less than 50 ml is suggestive of decreased circulatory fluid volume and may indicate acute renal failure.
- If possible, take abdominal X-rays. Flat abdominal (horizontal) X-rays can identify air or fluid levels in the bowel. In the case of clostridia infection, gas may be seen in the tissues. Upright abdominal X-rays will show air under the diaphragm if uterine or bowel perforation has occurred.

**Definitive Management of Infection or Sepsis**

Because retained POC are most often the source of infection, prompt uterine evacuation is the first step after the woman is stable. In addition, the possibility of intra-abdominal injury, pelvic abscess and peritonitis, all of which may require surgery for definitive treatment, must also be considered as sources of infection. If the woman has an IUD in place, antibiotics should be started before the IUD is removed. Finally, gas gangrene and tetanus are also possibilities to consider; they require specialized care at a higher-level (referral) hospital. All sources of infection must be identified and treated.

---

**What to Do If an IUD Is in Place**

If a woman who comes for postabortion care has an infection, start her on antibiotics and then remove the IUD before performing uterine evacuation.

If the woman is not pregnant, but has PID, she meets WHO Medical Eligibility Criteria (MEC) category 2 (the advantages of using the method generally outweigh the theoretical or proven risks). She should be counseled, given antibiotics and advised that she can keep the IUD in place while she is on antibiotics.
Disseminated Intravascular Coagulation (DIC)
If the woman is bleeding from several places and the bleeding is not easily stopped, quickly assess her for disseminated intravascular coagulation (DIC), a bleeding disorder that is sometimes seen with severe cases of sepsis.

Signs of DIC include:
- Bleeding from inside the mouth, bladder, injection site or venipuncture site
- Blood in the urine
- Failure of the woman’s blood to clot:
  - If no lab is available, look at places where blood has pooled such as on the bed or floor to assess clotting
- Decreased platelet count

Treating the underlying sepsis is the mainstay of management of DIC. Giving blood products, such as fresh whole blood or fresh frozen plasma, can help control bleeding while the infection is being treated. Referral to a higher-level (tertiary) facility is usually required.

Intra-Abdominal Injury
Injury to internal organs is a life-threatening complication as well as a cause of serious, long-term, poor health among patients with postabortion complications. These injuries include uterine perforation and possible damage to surrounding organs, including the cervix, vagina or bowel. The risk of infection, sepsis, peritonitis and tetanus is very high. Uterine perforation may be discovered during the initial physical exam or later during uterine evacuation. In rare cases, uterine perforation can occur during evacuation with VA.

Because intra-abdominal injury may initially present without symptoms, and then progress rapidly to serious and even life-threatening complications, every woman being treated for postabortion complications should be checked for signs of intra-abdominal injury. Rapid diagnosis and treatment are essential. If there is any indication of intra-abdominal injury, close attention should be paid to the blood pressure and heart rate as shock may develop at any time.

A ruptured ectopic pregnancy or ovarian cyst can present with symptoms of intra-abdominal hemorrhage similar to intra-abdominal injury. A woman who has a history of ectopic pregnancies, pelvic infection or use of certain contraceptive methods has a greater possibility of experiencing an ectopic pregnancy. Any delay in its treatment is extremely dangerous and may lead to death unless there is surgical intervention—making a quick diagnosis is critically important.

Signs and Symptoms of Intra-Abdominal Injury
The signs and symptoms of intra-abdominal injury include:
- Severe abdominal pain/cramping
- Distended abdomen
• Nausea/vomiting
• Fever
• Shoulder pain
• Decreased bowel sounds
• Tense, hard abdomen
• Rebound tenderness

Any of the above symptoms, combined with signs of shock, may indicate major intra-abdominal hemorrhage.

Initial Treatment of Intra-Abdominal Injury
The initial treatment of intra-abdominal injury may include the following:
• Check vital signs.
• Do not give anything by mouth, as surgery may be needed.
• Make sure that the airway is open. If the client is unstable, give oxygen 6–8 liters/minute by cannula or mask.
• If there is any indication that infection may be present (e.g., fever, chills, pus), give broad-spectrum antibiotics (IV or IM).
• If the woman has been exposed to tetanus and her vaccination history is uncertain, give her tetanus toxoid.
• To restore fluid volume, give IV fluids (normal saline or Ringer’s lactate), 1 liter in 15–20 minutes or faster, using a large-gauge needle. It may take 1–3 liters of IV fluids to stabilize a woman who has lost a lot of blood or is in shock.
• Check her hemoglobin or hematocrit. Also cross-match and perform a clotting test, if available. A hemoglobin of 5 g/100 ml or less or hematocrit of 15% or less is life-threatening and will require blood transfusion.
• Give IV or IM analgesia for pain management.
• Monitor urine output. An hourly output of less than 50 ml is suggestive of decreased circulatory fluid volume and may indicate acute renal failure.
• If possible, take abdominal X-rays. An upright abdominal X-ray will help determine if there is gas in the abdominal cavity (i.e., ruptured/perforated uterus, bowel or bladder).

Definitive Treatment of Intra-Abdominal Injury
Any of the following conditions is a surgical emergency requiring immediate laparotomy:
• Rigid abdomen
• Acute abdominal pain AND persistent low blood pressure or shock that fails to stabilize after infusion of up to 3 liters of normal saline or Ringer’s lactate
An abdominal X-ray showing air or gas in the peritoneal cavity

If laparotomy is not available, immediately refer the woman to the appropriate facility where she can receive these services. In these cases, laparotomy is necessary to find and repair the injury. Peritonitis, uterine perforation, bowel injury, intra-abdominal injury and ruptured ectopic pregnancy must be considered. It may be necessary to drain the abdomen to remove or repair the injured tissue. In extreme cases, a hysterectomy may also be required.

Once the intra-abdominal injury is treated—or if intra-abdominal injury is suspected but the woman is stable, the X-ray is negative, her abdomen is not rigid, and there are no signs of ectopic pregnancy—evacuate the uterus. If intra-abdominal injury is discovered during the procedure, a laparotomy may be needed to repair the injury.

**Uterine Perforation**

Uterine perforation most often occurs with induced abortion by unqualified persons; those clients will present with the symptoms below. Uterine perforation during VA is rare. If uterine perforation occurs during the VA procedure, it usually causes only a small tear that does not require laparotomy to repair. Contraction of the uterus after evacuation often closes the opening and stops the bleeding.

Perforation of the uterus as a complication of incomplete abortion is usually the result of instrumentation to induce an abortion, generally by an untrained person. It can be life-threatening, and prompt management is indicated because there is a high probability of infection and damage to other abdominal/pelvic organs. Large perforations will not close spontaneously; they can bleed profusely and the blood can collect intra-abdominally with little or no vaginal bleeding.

**Signs of Uterine Perforation before VA**
The signs of uterine perforation before VA include:
- Fast pulse (≥110 per minute)
- Falling blood pressure (diastolic <60)
- Excess bleeding
- Signs and symptoms of intra-abdominal injury

**Signs of Uterine Perforation during VA**
The signs of uterine perforation during VA include:
- Cannula, dilator or other instrument penetrates beyond expected size of the uterus
- Vacuum decreases with the cannula well inside the uterus
- Excessive bleeding after the uterus is empty
- Fat or bowel in aspirated tissue found during or after the procedure
Initial Treatment of Uterine Perforation

Guidelines for the initial treatment of uterine perforation include:

- If uterine evacuation has not started:
  - Check for signs of intra-abdominal injury:
    - If present, treat accordingly before performing evacuation.
    - If not present, proceed cautiously with evacuation.

- Treatment during uterine evacuation (evacuation not complete):
  - Begin IV fluids and antibiotics.
  - Check hematocrit; arrange for blood transfusion if indicated (hematocrit ≤15% or hemoglobin ≤5 mg/100 ml).
  - Complete the evacuation under direct visual control (laparoscopy or laparotomy) to assess damage to pelvic organs and to prevent further damage. If laparoscope is not available, refer to higher level of care.
  - Repair damage as necessary by either coagulating the bleeder or suturing the defect via minilaparotomy. Make sure that the bowel is intact and there is no injury to other abdominal organs.
  - After surgery, give oxytocics (if the uterus has not been removed) and observe vital signs every 15 minutes for two hours.
  - If the client becomes stable and bleeding slows, give ergometrine (0.2–0.5 mg IM, contraindicated in clients with hypertension) and observe overnight.
  - If condition worsens, transfer to a higher level of care.

- Treatment of perforation if the evacuation is complete:
  - Begin IV and broad-spectrum antibiotics.
  - Give ergometrine (0.2–0.5 mg IM); repeat as needed up to three doses.
  - Observe for two hours, checking vital signs frequently.
  - If the client becomes stable and bleeding slows, give additional ergometrine (same dose) and continue observation overnight.
  - If client condition worsens, give additional dose of oxytocin or ergometrine.
  - If bleeding continues, a laparoscopy or minilaparotomy may be needed:
    - Transfer the woman as soon as possible to a higher level of care.

Referral Guidelines

When a client needs to be referred or transferred, arrangements should be timely and efficient. The referring site must have everything possible to stabilize and treat the woman. Standing arrangements for referral and transportation should exist at all health facilities. These arrangements
may require coordination with community resources such as police, military, taxis, community
leaders, other health programs, churches and even private owners of vehicles.

Preparing for Client Referral and Transport
Stabilize the client:

- Manage the airway, respiration and circulation.
- Control bleeding.
- Replace fluids IV.
- Manage pain.
- Prepare referral information: client information, history, assessment and initial treatment;
  arrange for prompt transport.
- Alert referral center that the client is on her way.

During Transport
- Accompany the client; trained staff should travel with the client, if possible.
- Continue treatments including oxygen and IV therapy, if possible.
- Keep the client warm.
- If she is in shock or hemorrhaging, keep her feet elevated.
Figure 2.6-1: Sample Referral Form

REFERRAL SLIP

Name of Clinic: __________________________
Patient Name: __________________________
Patient Address: _________________________
Sex: __________________ Age: ____________
Treatment Date: ________________________
Diagnosis: _____________________________
Temporary Treatment: __________________
Refer To: ______________________________
For: __________________________________

Vital Signs

<table>
<thead>
<tr>
<th>Initial Contact</th>
<th>Before Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temp:</td>
<td>Tamp:</td>
</tr>
<tr>
<td>BP:</td>
<td>BP:</td>
</tr>
<tr>
<td>Pulse:</td>
<td>Pulse:</td>
</tr>
<tr>
<td>Resp:</td>
<td>Resp:</td>
</tr>
</tbody>
</table>

Day: _______ Month: _______ Year: ________
Signature: _______________________________
Clinic Physician: ________________________

Adapted from Reproductive Health Association of Cambodia (RHAC)

Adapted from: Reproductive Health Association of Cambodia. Form can be downloaded for free, unrestricted use at: www.postabortioncare.org.
Figure 2.6.2: Initial Assessment

**Presentation**
- In a woman of reproductive age.
- Vaginal bleeding
- Cramping or lower abdominal pain
- History of delayed menses

**Initial Step**
- Assess for shock:
  - Rapid weak pulse
  - Low blood pressure
  - Pale and sweaty
  - Rapid breathing
  - Anxious, confused or unconscious

**If there are signs of shock:**
- Immediate action is required
- See Chart 2

**Complete Clinical Assessment**
- **Review history:** Length of amenorrhea/LMP, duration and amount of bleeding, duration and severity of cramping, abdominal pain, shoulder pain, drug allergies
- **Physical exam:** Vital signs, heart, lung, abdomen, extremities
  - Indication of systemic problem (shock, sepsis, etc.)
- **Pelvic exam:** Uterine size, stage of abortion, uterus position
- **Other:** Remove any visible products of conception in the os
  - Determine Rh if possible

**Moderate to Light Vaginal Bleeding**
- Clean pad not soaked after 5 minutes
- Fresh blood, no clots
- Mixed with mucus

**Severe Vaginal Bleeding**
- Heavy, bright red vaginal bleeding with or without clots
- Blood soaked pads, towels, clothing
- Pallor

**Intra-Abdominal Injury**
- Distended abdomen
- Decreased bowel sounds
- Tense, hard abdomen
- Rebound tenderness
- Nausea, vomiting
- Shoulder pain
- Fever
- Abdominal pain, cramping

**Sepsis**
- Chills, fever, sweats
- Foul smelling vaginal discharge
- History of interference with the pregnancy
- Abdominal pain
- IUD in place
- Prolonged bleeding
- Flu-like symptoms

See Chart 3
See Chart 4
See Chart 5
See Chart 6

Figure 2.6.3: Shock

**Presentation**

<table>
<thead>
<tr>
<th>Early Shock</th>
<th>Late Shock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulse &gt;110</td>
<td>Pulse very fast</td>
</tr>
<tr>
<td>Blood pressure 90 syst</td>
<td>Blood pressure very low</td>
</tr>
<tr>
<td>Pale and sweaty</td>
<td>Pale and cold</td>
</tr>
<tr>
<td>Breathing &gt;30</td>
<td>Breathing extremely fast</td>
</tr>
<tr>
<td>Awake,</td>
<td>Confused</td>
</tr>
<tr>
<td>Aware, conscious</td>
<td>Unconscious</td>
</tr>
<tr>
<td>Lungs clear</td>
<td>Pulmonary edema</td>
</tr>
<tr>
<td>Hematocrit&gt;26%</td>
<td>Hematocrit &lt;26%</td>
</tr>
<tr>
<td>Urine output &gt;30cc/hr</td>
<td>Urine output ~30cc/hr</td>
</tr>
</tbody>
</table>

**Initial Treatment**

Universal:
- Ensure airway is open
- Check vital signs
- Elevate feet
- Keep warm
- Turn woman’s head and body to the side
- No fluids by mouth

Oxygen:
- 6-8 litres/minute

Fluids:
- IV fluids, isotonic solution or Ringer’s lactate
- 1 litre/20 minutes
- No fluids by mouth
- Measure urine output

Meds:
- Begin antibiotics if there are signs of sepsis (IV or IM, IV preferred)

Additional:
- Listen to heart and lungs
- Vaginal exam and remove any visible products of conception in the os
- Give blood if HB<5g/100ml or Hct<15%

Labs:
- Draw blood (type and crossmatch, CBC, platelets, electrolytes, urea, creatinine)
- Chest x-ray if pulmonary edema suspected

**Assess response to fluids after 20-30 minutes**

*Signs of stabilization:*
- Increased blood pressure syst > 100
- Stabilizing hematocrit
- Improving mental status > 100 ml per 4 hours
- Increasing urine output

If stable:
- Adjust IV and oxygen
- Complete clinical assessment
- Begin to treat underlying cause of shock
- Observe

Uterine evacuation

See Chart 3

If not stable:
- Continue IV and oxygen
- Reassess signs of sepsis and need for antibiotics
- Complete clinical assessment
- Begin to treat underlying cause of shock

Assess after 2 hours

*Signs of stabilization:*
- Increased blood pressure syst > 100
- Stabilizing hematocrit
- Improving mental status
- Increasing urine output > 100 ml per 4 hours

If stable:
- Adjust IV and oxygen
- Complete clinical assessment
- Continue treating underlying cause of shock
- Observe
- Uterine evacuation

See Chart 3

If not stable:
- Refer to a secondary or tertiary hospital

Figure 2.6.4: Moderate to Light Vaginal Bleeding

Presentation
Clean pad not soaked after 5 minutes
Fresh blood, no clots
Mixed with mucus

Complete Clinical Assessment
Review history:
- Length of amenorrhea/LMP, duration and amount of bleeding, duration and severity of cramping, abdominal pain, shoulder pain, drug allergies

Physical exam:
- Vital signs, heart, lung, abdomen, extremities
- Indication of systemic problem (shock, sepsis, etc.)

Pelvic exam:
- Uterine size, stage of abortion, uterine position

Other:
- Remove any visible products of conception in the os
- Determine Rh if possible

Threatened Abortion
- Cervix closed
- Light to moderate bleeding
- Uterine size equal to dates LMP

Incomplete or Inevitable Abortion
- Cervix open
- Light, moderate or heavy bleeding
- Uterine size less than or equal to dates LMP

Complete Abortion
- Cervix open or closed
- Light to moderate bleeding
- Uterine size less than or equal to dates LMP

Missed Abortion
- Cervix closed
- Little or no bleeding
- Uterine size less than or equal to dates LMP

First Trimester
- Antibiotics if signs of infection
- Pain control as needed
- Vacuum aspiration or D&C

If there are signs of uterine perforation:
- Instrument extends beyond uterus
- Fat or bowel in specimen

If evacuation complete:
- Begin antibiotics
- Oxytocin
- Observe (2 hours)

If bleeding stops:
- Give ergometrine
- Observe

If bleeding continues:
- Laparotomy, or refer if not available

If evacuation NOT complete:
- Begin antibiotics
- Evacuate uterus (direct vision)
- Oxytocin
- Observe (2 hours)

If laparotomy not available, refer

If bleeding stops:
- Observe overnight

If bleeding continues:
- Refer

If stable:
- Give ergometrine
- Observe overnight

If NOT stable:
- Give ergometrine
- Refer to tertiary

Second Trimester
- Antibiotics if signs of infection
- Pain control as needed
- Uterotonic or instrumental curettage

If no signs of perforation or other complications:
- Examine specimen
- Family planning
- Discharge

Figure 2.6.5: Severe Vaginal Bleeding

Presentation

- Heavy, bright red vaginal bleeding
- Clots or no clots
- Blood soaked pads, towels, clothing
- Pallor

Initial Treatment

**Universal:**
- Ensure airway is open
- Check vital signs
- Elevate feet
- Hct, HB
- General health status
- Abdominal exam

**Oxygen:**
- 6 - 8 litres/minute

**Fluids:**
- IV fluids, isotonic solution or Ringer's lactate
- 1 litre/20 minutes
- No fluids by mouth

**Meds:**
- Antibiotics IV or IM
- Tetanus toxoid and antitoxin if exposed

**Labs:**
- Draw blood Hct/HB, type, crossmatch

**Additional**
- Give blood if HB <5g/100ml or Hct <15%
- Pain control
- Uterine evacuation
- Uterine massage
- Prepare for referral

If no IV:

**Suspicion of intra-abdominal injury:**
- Rigid abdomen, acute abdominal pain, etc.
- Immediate assessment is required
- Emergency laparotomy may be indicated
- See Chart 5

**Visible cervical or vaginal laceration**
- Give pain control
- Suture

**Incomplete abortion**
- In addition to bleeding:
  - Cervix open
  - Uterine size < or = dates LMP
- Continue IV and oxygen
- Determine uterine size at presentation

**Evidence of uterine perforation**
- Instrument extends beyond uterus
- Fat or bowel in specimen
- Management depends on whether or not evacuation is complete
- Continue IV fluids
- See Chart 3

**Evacuate uterus**
- < 14 weeks: Vacuum Aspiration or D&C
- > 14 weeks: Oxytocics or instrumental curettage
- See Chart 3

Figure 2.6.6: Intra-Abdominal Injury

**Presentation**

Suspect intra-abdominal injury if there are any of these signs with any of these symptoms:

- **Signs**
  - Distended abdomen
  - Decreased bowel sounds
  - Tense, hard abdomen
  - Rebound tenderness

- **Symptoms**
  - Nausea, vomiting
  - Shoulder pain
  - Fever
  - Abdominal pain, cramping

**Initial Treatment**

**Universal:**
- Ensure airway is open
- Check vital signs

- **Oxygen:**
  - 6-8 litres/minute

- **Fluids:**
  - IV fluids, isotonic solution or Ringer's lactate
  - 1 litre/20 minutes
  - No fluids by mouth
  - Blood transfusion if HB <5g/100 ml or Hct <15%

- **Meds:**
  - Immediately begin antibiotics (IV or IM, IV preferred)
  - Tetanus toxoid and antitoxin if exposed

- **Labs:**
  - Draw blood for HB Hct, type and crossmatch
  - Measure urine
  - Upright abdominal x-ray

**Screening for surgical emergency:**

- Rigid abdomen
- Acute abdominal pain and persistent low blood pressure
- Shock not stable after 1-3 litres IV fluids
- Abdominal x-ray shows air in peritoneal cavity

**Emergency laparotomy to possibly drain abdomen, repair tissue surgically, or remove uterus if necessary**

**If laparotomy is not available:**

- Give pain control
- Continue IV fluids
- Continue antibiotics
- Continue oxygen if possible
- Refer to tertiary hospital

**Continuing Treatment**

- Monitor vital signs, urine output, fluids, signs of shock
- Continue IV, oxygen, IV antibiotics
- Give pain control

**Condition is stable:**

- X-ray negative
- Abdomen not rigid
- No signs of ectopic pregnancy
- Evacuate the uterus (See Chart 3)

**Condition NOT stable:**

- Treat for shock
- See Chart 2

---

Figure 2.6.7: Sepsis

**Presentation**
- Chills, fever, sweats
- Foul-smelling vaginal discharge
- History of interference
- Abdominal pain
- IUD in place
- Prolonged bleeding
- Flu-like symptoms

**Initial Assessment of Risk for Septic Shock**
- Length of gestation
- Check vital signs
- Check for signs of pelvic infection
- Foreign material in vagina
- Pus in cervix or vagina
- Evidence of local pelvic infection
  - Adnexal tenderness
  - Uterine tenderness
  - Cervical motion tenderness
  - Lower abdominal tenderness
- Foul odour to any blood or secretions, faeces or urine

**Low Risk of Septic Shock**
- Mild to moderate fever (38.5°C or less, 101.5°F or less)
- Vital signs stable
- First trimester abortion
- No evidence of intra-abdominal injury

**Initial Treatment:**
- Universal:
  - Ensure airway is open
  - Monitor vital signs
- Fluids:
  - IV fluids if available
- Meds:
  - Antibiotics (IV preferred)
  - Tetanus toxoid and tetanus antitoxin
  - Pain control

**High risk of Septic Shock**
- High fever (greater than 38.5°C or 101.5°F)
- Second trimester abortion
- No evidence of intra-abdominal injury
- Evidence of shock (See Chart 2)

**Initial Treatment:**
- Universal:
  - Ensure airway is open
  - Monitor vital signs
- Oxygen:
  - 6-8 litres/minute
- Fluids:
  - Large bore IV, isotonic or compound solution of sodium lactate 1 litre/20 minutes (no fluids by mouth)
  - Measure urine output
- Meds:
  - Immediately begin antibiotics IV or IM, IV preferred
  - Tetanus toxoid
  - Pain control
- Additional:
  - If bleeding disorder, assess for DIC
- Labs:
  - Complete blood count (CBC)
  - Abdominal x-rays if available

If patient is stable:
- Continue antibiotics and IV
- Uterine evacuation (See Chart 3)
- Observe for 48 hours

If signs of DIC are present:
- Blood does not clot
- Bleeding from venipuncture sites, etc.
- Uterine evacuation (See Chart 3)
- Give fresh whole blood if necessary and heparin 5000-10 000 units IV six hourly if available
- Refer to tertiary care centre

If there are signs of gas gangrene or tetanus:
- Gas gangrene: x-ray shows gas in pelvic tissue
- Tetanus: painful muscle contractions, generalized spasms, convulsions
- Refer to tertiary care centre after initial stabilizing efforts + antibiotics and sedation if tetanus

If signs of intra-abdominal injury develop:
- X-ray shows air in abdomen
- Abdomen rigid, rebound tenderness etc.
- Continue oxygen, antibiotics, and IV
- Emergency laparotomy

If signs of shock develop:
- Dropping blood pressure
- Fast, weak pulse
- Fast breathing
- Pallor, etc.
- Immediate attention is required


2 Ibid.


5 Ibid.


9 Ibid.
Family Planning Counseling and Service Provision, STI Evaluation and Treatment, and HIV Counseling and/or Testing

Family Planning Counseling and Service Provision

Summary
A woman’s fertility can resume almost immediately—as soon as two weeks after an incomplete abortion. She should carefully consider, therefore, whether or not she wants to become pregnant again, and when. Some clients who have experienced miscarriages may soon be ready for another pregnancy. For others, their experience with incomplete abortion represents a desire not to be pregnant at this time. In either case, every PAC client and her partner, if she desires, should be offered counseling and information about her return to fertility and available contraceptive options. Throughout counseling, it is important to emphasize healthy timing and spacing of pregnancy. Delaying pregnancy for at least six months after an abortion or miscarriage reduces the chances of low birth weight, maternal anemia and pre-term birth in the next pregnancy. As emphasized throughout this document:

Postabortion care is incomplete without the inclusion of family planning services.

Full information about all available contraceptive methods and related counseling is not included in this module. The focus is primarily on aspects of family planning that are relevant in the PAC situation. However, resources that include the most recent evidence-based information are readily available. Recommended materials include:

5. *Family Planning: A Key Component of Post Abortion Care* 2009, FIGO/ICM/ICN/USAID

Session Objectives
At the end of this session, participants will be able to:

1. State the essential information about family planning that all postabortion clients must have before they leave the service site
2. Explain the importance of informed choice for effective family planning services
3. Describe personal and clinical factors that should be considered in family planning counseling for postabortion clients
4. Demonstrate appropriate family planning counseling during different phases of care

5. State one consensus point of the consensus statement by the International Federation of Gynecology and Obstetrics (FIGO), International Confederation of Midwives (ICM), International Council of Nurses (ICN) and United States Agency for International Development (USAID) on postabortion family planning

**Unmet Need for Family Planning**

When women or couples prefer to avoid or postpone a pregnancy, but they are not currently using any contraceptive method, this is defined as an unmet need. An estimated 215 million women who want to avoid a pregnancy are not using an effective method of contraception. Many factors such as lack of access to contraceptive services, lack of knowledge about contraceptives, including misinformation and myths, and social disapproval, contribute to this unmet need.³

Family planning services and supplies currently prevent 187 million unintended pregnancies each year, including 60 million unplanned births and 105 million abortions. This has measurable health benefits. If the unmet need for family planning were met, unintended pregnancies would drop by more than two-thirds, from 75 million in 2008 to 22 million per year; 70% of maternal deaths would be averted—a decline from 550,000 to 160,000; 44% of newborn deaths would be averted—a decline from 3.5 million to 1.9 million; unsafe abortions would decline by 73%, from 20 million to 5.5 million; and the number of women needing medical care for complications of unsafe procedures would decline from 8.5 million to 2 million.⁴

**Postabortion Family Planning**

Receiving emergency postabortion services may be one of the few points of contact with the health care system for many women. As a result, this is an important opportunity to provide contraceptive information and services that should not be overlooked.

Currently, the role of the PAC provider in regard to family planning service delivery varies from country to country and even from site to site at times. In some cases, the provider will offer initial counseling and make referrals to family planning services outside the PAC site. In other cases, the provider will offer initial counseling for family planning services located within the same facility. In some programs, PAC and family planning may be completely integrated, with the same staff providing both services.

However, there is strong evidence that indicates an increase in postabortion family planning usage when services are provided at the same time and in the same place as medical treatment, and when couples are counseled together regarding family planning options.⁵ Therefore, offering family planning and treatment for incomplete abortion services in the same location and at the same time can result in more effective family planning use and reduction of repeat abortions.⁶
The PAC provider is a crucial link in helping postabortion clients recognize their need for contraception, overcoming possible misconceptions and fears regarding contraceptive methods, and building confidence and trust in the health care system, which will increase a postabortion client’s likelihood of accepting a contraceptive method. The role of the PAC provider in providing postabortion family planning counseling and services has been further illuminated in the joint consensus statement by the International Federation of Gynecology and Obstetrics (FIGO), International Confederation of Midwives (ICM), the International Council of Nurses (ICN) and the United States Agency for International Development (USAID). This document notes that doctors, midwives and nurse have a special role in advocating for women who have had an abortion and in ensuring that quality postabortion family planning services are provided. One of the key consensus points is that FIGO, ICM and ICN health professionals have a special advocacy role with policymakers and governments for ensuring quality postabortion family planning services, sharing responsibilities, strengthening professional education and improving health outcomes.

To help break the cycle of repeated, unplanned pregnancy and unsafe abortions, and to help women achieve healthy spacing between pregnancies, family planning information, counseling and services should be offered, at a minimum, to all PAC clients regardless of the place of treatment (MVA room or operating theater). Before discharge, each woman should understand:

- That she can become pregnant again before the next menses, as fertility returns in as little as two weeks;
- That there are safe methods to prevent or delay pregnancy that can be used immediately;
- That the risk for an adverse outcome to a pregnancy, including repeat miscarriage, should she wish to have a baby, is less when there is an interval of at least six months between this miscarriage and her next pregnancy; and
- Where and how to obtain family planning services and methods, either at the time of treatment or after discharge, especially if not available in the same facility where PAC services are provided.

Postabortion family planning should include all the essential elements of good family planning care in general:

- Information and counseling about methods, their characteristics, effectiveness and limitations (including side effects)
- Choices among methods (e.g., short- and long-acting, hormonal and non-hormonal)
- Assurance of contraceptive re-supply
- Access to follow-up care
- Counseling about contraceptive needs in the context of the woman’s personal reproductive health goals and needs

Postabortion family planning should also be based upon an individual assessment of each woman’s unique situation, taking into account:

- Her personal characteristics, needs and reproductive goals
Her clinical condition

The service delivery capabilities where she receives treatment and in the community where she lives

It is important to have a clear and complete discussion of these points, as understanding the circumstances leading up to a woman’s incomplete abortion will help providers assist her in choosing the most appropriate contraceptive method. It will also help increase the likelihood that a woman will accept a contraceptive method before she leaves the facility.

A woman’s personal preferences, constraints and social situation may be as important in postabortion family planning as her clinical condition.

Family Planning Counseling

The goals of postabortion family planning counseling are to help the woman (and her partner):

- Understand the factors that led to an unwanted pregnancy and what can be done to avoid repeating the situation
- Understand that fertility can return almost immediately
- Decide if she wants to use a contraceptive method:
- If she does, to help her (and her partner) choose an appropriate method, and use the method effectively
- Understand the benefits of healthy timing and spacing of pregnancy

Informed Choice

Free and informed choice means that the client chooses a contraceptive method voluntarily, and without pressure or coercion. It is based on a clear understanding of the benefits and limitations of the methods that are available. The client should understand that almost all methods can be used safely and effectively immediately after treatment of an incomplete abortion and that (except in the case of permanent methods) she can choose another method later if she wishes to change.

Although many women do not want to become pregnant again immediately after an incomplete or unsafe abortion, some women may not want to make a decision about contraception at the time of PAC services. A mechanism should be in place to ensure that these women can return for contraceptive services or are referred to a facility in their community. They should be offered condoms to take home and encouraged to return or visit a local facility for further counseling and an ongoing method.

It is also possible that the client may choose not to use a family planning method. The use of contraceptives should be completely voluntary. There should be absolutely no denial of rights or benefits, such as food or medical care, to individuals who decide not to use family planning services.
Acceptance of contraception or a particular method should never be a prerequisite for obtaining medical treatment.

Clients who have made a free and informed choice of method are more likely to be satisfied with the method and to continue using it effectively.

The following summarizes the importance of informed choice and voluntary contraceptive use:

- The effectiveness of a contraceptive method is generally related to: 1) users having adequate information to use the method as desired, 2) users feeling good about continuing its use or switching to another method if it is not satisfactory, and 3) users and their partners having adequate information about possible side effects and how to deal with them. Assisting clients with other options if their chosen method becomes unacceptable will also reduce the possibility of family planning discontinuation.

- When a contraceptive method is provided through coercion, effectiveness may be reduced due to inadequate information about how to use the method properly and/or resentment about being forced to accept it, leading to discontinuation. This can result in more unplanned pregnancies and possibly more unsafe abortions.

- The health care system may become known for being abusive to its clients, driving people away from seeking needed services, including family planning, postabortion care and other medical services.

- Providers may not be aware of any short-term impact, but the potential long-term effects of not allowing clients to make informed choices are reduced use of family planning, greater morbidity due to abortion complications that go untreated or for which treatment is delayed, and increased morbidity due to closely spaced and numerous pregnancies.

**Family Planning Information**

As already presented, the minimum information about family planning that a woman treated for incomplete abortion needs to understand before she is discharged is:

- She will be at risk of repeat pregnancy as soon as two weeks from PAC treatment.

- If she becomes pregnant again before six months, there is a higher risk of low birth weight, preterm birth, premature rupture of membranes and maternal anemia with the next pregnancy.

- There are a variety of safe contraceptive methods that can be used immediately to avoid or space pregnancies.

- Where and how to get family planning services (at the time of treatment and after discharge).

She also needs to know the following information, either at this time or later:

- Characteristics of all methods, including natural family planning (e.g., effectiveness, reversibility, protection from STIs/HIV, limitations, side effects)
- How to use the selected method correctly, including how to cope with any side effects and where and how to get additional supplies (e.g., pills, condoms, injectables)
- How to stop using the method or switch to another method

Family planning counseling should help a client to:
- Consider her reproductive goals, including the need for protection against STIs, including HIV
- Make free, informed choices about family planning
- Understand how to use effectively or stop using her chosen method

### Keys to Good Counseling

A good counselor:
- Understands and respects the client’s rights
- Earns the client’s trust
- Understands the benefits and limitations of all contraceptive methods
- Understands the cultural and personal factors that affect a woman’s (or a couple’s) decision to use family planning and a particular method
- Encourages the client to ask questions
- Uses a nonjudgmental approach, which shows the client respect and kindness
- Presents information in an unbiased, client-sensitive manner
- Actively listens to the client’s concerns
- Recognizes when s/he cannot sufficiently help a client and refers the client to someone who can
- Understands the effect of nonverbal communication


In addition to the “Keys to Good Counseling,” the GATHER or REDI models are approaches to organizing the elements of the counseling process and are outlined at the end of this session. While a woman needs complete information in order to effectively use her chosen method, too much technical information can be overwhelming and make it difficult for her to make a decision about which method to use. The information that a woman receives must be tailored to her needs, as determined by her:
- Personal situation,
- Clinical condition, and
- Access to family planning services in her community.
Personal Situation
One set of factors that can affect the client’s contraceptive needs and choices is her personal situation or circumstances. For example, some aspects of her personal situation may be related to the unplanned pregnancy or incomplete abortion or may be a barrier to contraceptive use. While maintaining confidentiality, the provider can obtain information to help the client select a suitable method.

Some of the important personal issues that affect selection of methods are:

■ Does the client want to become pregnant again soon?
■ Was the client a victim of sexual abuse or rape?
■ Is the client a victim of physical abuse/physical violence?
■ Is she under stress, in pain or not prepared to make a long-term decision?
■ Has she ever used a family planning method? If not:
  ■ Did she lack information about it or did she choose not to use family planning?
  ■ What are some of the factors that led to her decision not to use family planning?
  ■ Does she desire family planning counseling now?
■ Was she using a contraceptive method when she became pregnant? If so:
  ■ Was she using it correctly and consistently?
  ■ Were there particular reasons why the method failed?
  ■ Would she be able to use the method effectively in the future?
  ■ Would she prefer a different method?
■ Are there partner/family or other issues to consider, such as:
  ■ A partner who may not be monogamous
  ■ A partner who is unwilling to use condoms
  ■ A partner or mother-in-law who disapproves of contraception
  ■ A partner who desires more children or children of a specific gender
  ■ Religious or cultural restrictions
  ■ Limited resources or access to health services
  ■ Many men want to have more information about their partner’s condition during PAC and more information on family planning.8 With the client’s consent, counseling the husbands/partners of PAC clients separately can increase both family planning usage and the support for PAC clients during recovery.9 At the same time, some women want their husbands to be informed about family planning methods and to be present with them during family planning counseling.10 Whichever approach is preferred by the couple should be supported.
Working with Adolescents

Adolescents who have experienced incomplete abortion may not have the support of their partners or parents, are more likely to feel isolation or emotional stress, and may have been victims of coercive sexual encounters.

Counselors must be supportive and non-punitive, and take care to express openness and compassion. Their personal judgments about adolescent sexual activity should not affect the interaction. They must understand that thorough counseling of adolescents is needed, because it may be more difficult for adolescents to use contraceptive methods consistently and correctly. Providers should never deny young women access to contraception because of their age or marital status. Providers must remember that, especially in very young women, pregnancy may be the result of rape or ongoing sexual abuse. In these cases, they should refer the clients to community services, if available.

If the young woman wants to avoid sexual behavior, the provider should counsel her on how to resist advances from peers and adult males. Many adolescents, especially those who are single, experience specific barriers to accessing and using reproductive health services. If possible, the provider should refer these clients to any special programs that focus on adolescent reproductive health.

Table 3.1-1 presents some possible counseling scenarios based on a woman’s personal situation and suggests the types of information and provider responses that are most relevant to her needs and concerns. The table will guide providers in enabling women to make family planning decisions.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Recommendations</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If the woman does not want to get pregnant soon</td>
<td>▪ Consider all temporary methods and all long-acting methods.</td>
<td>▪ Healthy timing and spacing of pregnancies helps prevent repeat abortion and future unplanned pregnancy.</td>
</tr>
<tr>
<td>2. If the woman wishes to end childbearing</td>
<td>▪ Consider all long-acting and permanent methods.</td>
<td>▪ Some women seeking post-abortion care may wish not to have any more children. Use of long-acting methods at the time of treatment can assist the woman in her reproductive intention.</td>
</tr>
<tr>
<td></td>
<td>▪ Provide only long-acting methods (i.e., implants or IUD) at the time of treatment.</td>
<td>▪ Having the woman return at a later time for sterilization ensures that the woman is not being coerced and that she is able to provide informed consent without being affected by pain or any emotions that she may or may not experience related to treatment.</td>
</tr>
<tr>
<td></td>
<td>▪ Schedule a follow-up appointment or referral if the woman desires female sterilization.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Male vasectomy can be appropriately provided at the time of the woman’s treatment, if desired.</td>
<td></td>
</tr>
<tr>
<td>Factors</td>
<td>Recommendations</td>
<td>Rationale</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| 3. If the woman is under stress or in pain                           | ▪ Consider all temporary methods. Do not encourage use of permanent methods at this time.  
    ▪ Provide referral for continued contraceptive care.                           | ▪ Stress and pain interfere with making free, informed decisions.  
    ▪ The time of treatment for abortion complications is not a good time for a woman to make a permanent decision. |
| 4. If the woman was using a contraceptive method when she became pregnant | ▪ Assess why contraception failed and what problems the woman might have had using the method effectively.  
    ▪ Help the woman choose a method that she will be able to use effectively. Explore strategies for effective use of the chosen method(s).  
    ▪ Make sure she understands how to use the method, get follow-up care and re-supply, discontinue use and change method. | ▪ Method failure, unacceptability, ineffective use or lack of access to supplies may have led to the unwanted pregnancy.  
    ▪ These factors may still be present and may lead to another pregnancy. |
| 5. If the woman had stopped using a contraceptive method               | ▪ Assess why the woman stopped using contraception (e.g., side effects, lack of access to re-supply, desire for pregnancy).  
    ▪ Help the woman choose a method that she will be able to use effectively.  
    ▪ Make sure she understands how to use the method, get follow-up care and re-supply, discontinue use and change methods. | ▪ Unacceptability or lack of access may have led to the unwanted pregnancy.  
    ▪ These factors may still be present and may lead to another unwanted pregnancy.  
    ▪ The woman may have lost a desired pregnancy and therefore needs to space for at least 6 months. |
| 6. If the woman has a partner who is unwilling to use condoms or will prevent use of another method | ▪ If the woman wishes, include her partner in counseling.  
    ▪ Protect the woman’s confidentiality.  
    ▪ Discuss methods that the woman can use without her partner’s knowledge (e.g., injectables).  
    ▪ Do not recommend methods that the woman will not be able to use effectively. | ▪ In some instances, involving the partner in counseling will lead to his use of and support for contraception. However, if the woman, for whatever reason, does not want to involve her partner, her wishes should be respected. In this case, the partner can be provided counseling separately. |
| 7. If the woman is the survivor of sexual abuse or rape                 | ▪ Inform her about emergency contraception (or other contraception, if appropriate).  
    ▪ Refer to social or legal support services if available. | ▪ The woman may be at risk for repeat assault or rape, and may have continuing need for emergency or other contraception. |
### Clinical Condition

In general, all modern methods of family planning can be used immediately after emergency postabortion care, provided:

- There are no severe complications requiring further treatment,
- The client receives adequate counseling, and
- The provider screens for any precautions for using a particular contraceptive method.

It is also recommended that women not have sexual intercourse until postabortal bleeding stops (usually five to seven days) and any complications are resolved. Finally, natural family planning is not recommended until a regular menstrual pattern returns.

Table 3.1-2 provides additional guidance for the selection of a contraceptive method based on a woman’s clinical condition. Note: The provider must always tailor the choice of methods to each client’s needs. For a more comprehensive discussion of the different contraceptive methods, refer to *Family Planning: A Global Handbook for Providers* (USAID/JHU/WHO 2007). Also, refer to the WHO Medical Eligibility Criteria for Contraceptive Use (MEC) for guidance with other medical conditions. See additional details on MEC at the end of this session.
<table>
<thead>
<tr>
<th>Clinical Condition</th>
<th>Recommendations</th>
<th>Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>No complications after treatment of incomplete abortion</td>
<td>Consider all temporary and long-acting methods, depending on the woman’s reproductive intentions.</td>
<td>Natural family planning: do not recommend until a regular menstrual pattern returns.</td>
</tr>
<tr>
<td></td>
<td>Progestin-only implants (Norplant®, Jadelle®, Implanon™): can be used immediately.</td>
<td>Female voluntary surgical contraception: the time of treatment for incomplete abortion usually is not the best time for clients to make decisions about methods that are permanent.</td>
</tr>
<tr>
<td></td>
<td>Injectables (DMPA, NET-EN): can be used immediately.</td>
<td>Note: If couples wish to have no more children, the return visit would be the appropriate time to provide a referral for male or female sterilization.</td>
</tr>
<tr>
<td></td>
<td>IUD: can be used immediately.</td>
<td>Diaphragm or cervical cap: should be refitted after a second-trimester incomplete abortion.</td>
</tr>
<tr>
<td></td>
<td>Oral contraceptives (combined or progestin-only): can be used immediately.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Condoms (male, female): can be used when sexual activity is resumed. Use for dual protection with another method.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spermicidal foams, jellies, tablets, sponge or film: can be used when sexual activity is resumed. However, these methods should be avoided if client is at risk for HIV.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diaphragm or cervical cap: can be used when sexual activity is resumed.</td>
<td></td>
</tr>
<tr>
<td>Confirmed or presumptive diagnosis of infection</td>
<td>Progestin-only implants (Norplant, Jadelle, Implanon): can be used immediately.</td>
<td>Female voluntary surgical contraception: do not perform procedure until infection is fully resolved (approximately 3 months) or until risk of infection is ruled out.</td>
</tr>
<tr>
<td></td>
<td>Injectables (DMPA, NET-EN): can be used immediately.</td>
<td>IUD: do not perform procedure until infection is fully resolved (approximately 3 months) or until risk of infection is ruled out.</td>
</tr>
<tr>
<td></td>
<td>Oral contraceptives (combined or progestin-only): can be used immediately and for dual method use.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Condoms (male, female): can be used when sexual activity is resumed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spermicidal foams, jellies, tablets, sponge or film: can be used when sexual activity is resumed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diaphragm or cervical cap: can be used when sexual activity is resumed.</td>
<td></td>
</tr>
<tr>
<td>Clinical Condition</td>
<td>Recommendations</td>
<td>Precautions</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Injury to genital tract&lt;br&gt;Uterine perforation (with or without bowel injury)&lt;br&gt;Serious vaginal or cervical injury, including chemical burns</td>
<td><strong>Progestin-only implants</strong> (Norplant, Jadelle, Implanon): can be used immediately.&lt;br&gt;<strong>Injectables</strong> (DMPA, NET-EN): can be used immediately.&lt;br&gt;<strong>Oral contraceptives</strong> (combined or progestin-only): can be used immediately.&lt;br&gt;<strong>Condoms</strong> (male, female): can be used when sexual activity is resumed and for dual method use.&lt;br&gt;<strong>Spermicidal foams, jellies, tablets, sponge or film</strong>: can be used when sexual activity is resumed (can be used with uncomplicated uterine perforation).&lt;br&gt;<strong>Diaphragm or cervical cap</strong>: can be used when sexual activity is resumed (can be used with uncomplicated uterine perforation).</td>
<td><strong>Female voluntary surgical contraception</strong>: do not perform procedure until serious injury is healed.&lt;br&gt;<strong>IUD</strong>: do not insert until serious injury is healed.&lt;br&gt;<strong>Spermicidal foams, jellies, tablets, sponge or film</strong>: do not begin use until vaginal or cervical injury is healed.&lt;br&gt;<strong>Diaphragm or cervical cap</strong>: do not begin use until vaginal or cervical injury is healed.</td>
</tr>
<tr>
<td>Severe bleeding (hemorrhage) and related severe anemia (HB &lt;7 gm/dl or Hct &lt;20)</td>
<td><strong>IUD</strong> (progestin-releasing): can be used with severe anemia (decreases menstrual blood loss).&lt;br&gt;<strong>Combined oral contraceptives</strong>: can begin use immediately (beneficial when hemoglobin is low).&lt;br&gt;<strong>Condoms</strong> (male, female): can be used when sexual activity is resumed and for dual method use.&lt;br&gt;<strong>Spermicidal foams, jellies, tablets, sponge or film</strong>: can be used when sexual activity is resumed.&lt;br&gt;<strong>Diaphragm or cervical cap</strong>: can be used when sexual activity is resumed.</td>
<td><strong>Female voluntary surgical contraception</strong>: do not perform procedure until the cause of hemorrhage or anemia is resolved.&lt;br&gt;<strong>Progestin-only pills</strong>: use with caution until acute anemia improves.&lt;br&gt;<strong>Progestin-only implants</strong> (Norplant, Jadelle, Implanon): delay insertion until acute anemia improves.&lt;br&gt;<strong>Injectables</strong> (DMPA, NET-EN): delay starting until acute anemia improves.&lt;br&gt;<strong>IUD</strong> (inert or copper-bearing): delay insertion until acute anemia improves.</td>
</tr>
</tbody>
</table>
As emphasized throughout this document, it is strongly recommended that family planning counseling and services be available as an integral part of PAC services. This is not the same as having a family planning clinic on site and referring the client to that clinic. Clinics often have daytime hours during the week and could very well be closed at the time of PAC services. Instead, all PAC providers should be trained to offer full family planning counseling and supplies. Counseling should begin as soon as possible during PAC service provision and integrated throughout the care.

Community Resources for Referral and Follow-Up

A client’s ability to use a method effectively depends, in part, upon her having access to services for a continuous supply and adequate support for the use of her chosen method. It also depends on the service’s ability to maintain an adequate supply of contraceptive methods. The family planning provider can also assist with matters such as side effects or changing methods, if desired. If a client has traveled far from home for treatment of an incomplete abortion, she will almost inevitably need to get follow-up services in her community rather than returning to the facility where she was treated.

Providers need to know what services a client will have access to when she returns home to help her choose an appropriate method. To assess the local capability to provide family planning services, the provider should consider:

- What public sector family planning resources are available? Where are they located and what are the costs?
- Are there private sector sources of family planning? For example, if a client is considering condom use for family planning or for protection from STIs and HIV, will she be able to get them from pharmacies

<table>
<thead>
<tr>
<th>Clinical Condition</th>
<th>Recommendations</th>
<th>Precautions</th>
</tr>
</thead>
</table>
| Second trimester incomplete abortion | Progestin-only implants (Norplant, Jadelle, Implanon): can begin use immediately.  
Injectables (DMPA, NET-EN): can be used immediately.  
Oral contraceptives (combined or progestin-only): can be used immediately.  
Condoms (male, female): can be used when sexual activity is resumed and for dual method use.  
Spermicidal foams, jellies, tablets, sponge or film: can be used when sexual activity is resumed. | Female voluntary surgical contraception: Use postpartum minilaparotomy. If this technique is not possible, delay procedure until uterus returns to pre-pregnancy size (4 to 6 weeks).  
IUD: Use postpartum insertion technique with high fundal placement. If an experienced provider is not available, delay insertion for 4 to 6 weeks.  
Diaphragm or cervical cap: should be refitted when uterus returns to pre-pregnancy size (4 to 6 weeks). |
or shops as well as, or instead of, public health clinics? Are there providers in private practice that offer family planning services? What are the costs?

- What other community services are available, such as services for clients who are survivors of domestic violence? Are there youth-friendly services available for adolescents?\(^\text{12}\)

- Are there established referral arrangements with community clinics and providers so that clients can be referred if they cannot, or choose not to, select a method at the time of treatment for abortion complications? If such arrangements do not yet exist, can they be set up?

Providers need to help clients think through issues, such as convenience or supply, and where they would go if they experienced problems with the method or re-supply. PAC providers can help clients to choose a method that they will be able to continue using in their communities by having a wide range of methods available at the time of emergency treatment. They must also be able to discuss the full range of methods without a bias toward a certain method or methods, thereby offering as many options to the client as possible.

It should be emphasized that functional referral mechanisms between facilities where clients are treated for incomplete abortion and family planning service delivery points are essential to postabortion family planning programs. As already mentioned, some clients will have to wait to begin using their preferred method because of their clinical condition or may choose to delay selecting a method, such as those who want to involve a partner or spouse in decision-making. Even those clients who choose a contraceptive method at the time of emergency treatment will need to go to a community provider or commodity supplier closer to home in order to use family planning effectively. And some treatment facilities will not be able to offer all methods of contraception, requiring that a client be referred to another facility to get her chosen method at times.

It is important that both providers and clients understand the referral system and how to use it. While providers may be guided by standard protocols, the client, in order to effectively access the referral system, will need the following information:

- Directions, telephone numbers, which transportation to access, and a street address for the referral facility.

- Whether she needs to take a referral card.

- Whether the providers will know about her incomplete abortion and treatment, or if this information is confidential within the treatment facility. What, if any, information about her incomplete abortion and treatment she should take along or tell her family planning provider.

- Hours or days of operation. Clients should be told if some methods are available only at certain times or on certain days.

- The name of whom to see, if she needs to see someone specific.

- What family planning counseling services are available.

- What contraceptive methods are available.

- What follow-up services are available.
- What additional services are available (STI information, HIV counseling and testing, social or legal services, counseling for such issues as domestic violence, antenatal care, well-baby care, follow-up care for spontaneous abortion).
- What the approximate charges will be.
- Answers to any questions the client may have.

**Contraceptive Methods for Postabortion Family Planning**

A woman without complications, who has received adequate counseling that included screening for precautions for method use, can safely use virtually all modern methods of contraception immediately following emergency treatment of incomplete abortion. As has been documented, oral contraceptives, condoms, spermicides, injectables and implants are safe and effective methods to use in the immediate postabortion period.\(^{13}\) For other women, factors such as infection, anemia, special procedures or delay of initiation must also be taken into consideration in the selection of a method. And, of course, the woman’s personal situation and the availability of services in her home community are also relevant.

**Remember:** While it is recommended that a woman not have sexual relations until postabortal bleeding stops (five to seven days), her fertility can return in less than two weeks. Therefore, it is critical that she begin using some form of contraception immediately if she wants to delay pregnancy.

The table below summarizes a number of elements that should be considered in the selection of a contraceptive method. These elements are based on the international standards in WHO’s *Medical Eligibility Criteria for Contraceptive Use* (Fourth edition, 2010). *Family Planning: A Global Handbook for Providers* (USAID/JHU/WHO 2007) is also an excellent resource.

National and local guidelines and protocols will provide additional information on dispensing contraceptive methods. Unfortunately, these protocols often are not up-to-date and may pose unnecessary barriers to client access. It is not uncommon, for example, to find that there are limits on providing methods containing estrogen to postabortion clients or on offering methods before six weeks after an incomplete abortion. Providers need to be familiar with their national and local protocols and be aware of such barriers. When appropriate, providers may be able to start or facilitate a change process to bring protocols in line with international standards.
### Table 3.1-3: Guidelines for Selection of Contraception, by Method

<table>
<thead>
<tr>
<th>Method</th>
<th>Timing Postabortion</th>
<th>Advantages</th>
<th>Other Characteristics</th>
</tr>
</thead>
</table>
| **Non-fitted barrier methods:** latex and vinyl male/female condoms; and vaginal sponge and suppositories (foaming tablets, jelly or film) | These methods may be used as soon as sexual intercourse is resumed.               | ▪ In the case of condoms (latex and vinyl), provide protection against STIs, including HIV  
▪ Are inexpensive  
▪ Are good interim method if use of another method must be postponed  
▪ Require no medical supervision  
▪ Are easily discontinued  
▪ Are effective immediately | ▪ Are less effective than IUD or hormonal methods  
▪ Require use with each episode of intercourse  
▪ Require continued motivation  
▪ Require re-supply to be available  
▪ May interrupt or interfere with intercourse |
| **Fitted barriers used with spermicides:** diaphragm or cervical cap with foam or jelly | The diaphragm can be fitted immediately after first-trimester abortion; after second-trimester abortion, fitting should be delayed until uterus returns to pre-pregnancy size (6 weeks).  
Fitting the cervical cap should be delayed until bleeding has stopped and the uterus has returned to its pre-pregnancy size (6 weeks). | ▪ Are inexpensive  
▪ Require no medical supervision  
▪ May provide some protection against STIs, including HIV  
▪ Are easily discontinued  
▪ Are effective immediately | ▪ Are less effective than IUD or hormonal methods  
▪ Require use with each episode of intercourse  
▪ Require continued motivation  
▪ Require re-supply to be available  
▪ Are associated with urinary tract infections in some users  
▪ Require fitting by trained service provider  
▪ Not for use in areas where there is a high risk for HIV transmission |
| **Oral contraceptives:** combined and progestin-only | Pill use may begin immediately, preferably on the day of treatment.              | ▪ Are highly effective  
▪ Can be started immediately, even if infection is present  
▪ Can be provided by non-physicians  
▪ Do not interfere with intercourse | ▪ Require continued motivation and daily use  
▪ Require re-supply to be available  
▪ May have reduced effectiveness if client has used certain medications (e.g., rifampin or dilantin) long-term  
▪ Necessitate condom use if client is at risk for STIs, including HIV |
<table>
<thead>
<tr>
<th>Method</th>
<th>Timing Postabortion</th>
<th>Advantages</th>
<th>Other Characteristics</th>
</tr>
</thead>
</table>
| **Injectables:** DMPA and NET-EN | Injection may be given immediately after first- or second-trimester abortion. Method may be appropriate for use if a woman wants to delay selection of long-acting method. | - Are highly effective  
- Can be started immediately, even if infection is present  
- Can be provided by non-physicians  
- Do not interfere with intercourse  
- Are not user-dependent (except for injection every 2 or 3 months)  
- Do not require client to obtain supplies; visit clinic only at time of scheduled re-injection | - May cause irregular bleeding, especially amenorrhea (excessive bleeding may occur in rare instances)  
- May cause delayed return to fertility  
- Require injections every 2 or 3 months  
- Necessitate condom use if client is at risk for STIs, including HIV |
| **Progestin-only implants:** Norplant implants, Jadelle, Implanon | Implants may be inserted immediately after abortion. If adequate counseling and informed decision-making cannot be guaranteed, insertion must be delayed and an interim method provided. | - Are highly effective  
- Provide long-acting contraceptive protection (effective for at least 5 years, and 3 years for Implanon)  
- Allow immediate return to fertility upon removal  
- Do not interrupt intercourse  
- Do not require client to obtain supplies | - May cause irregular bleeding (especially spotting) or amenorrhea  
- Require a trained provider to insert and remove  
- Are cost-effective only if used long-term  
- Necessitate condom use if client is at risk for STIs, including HIV |
| **IUD** | **First-trimester abortion:** IUD can be inserted if risk or presence of infection can be ruled out. Insertion should be delayed until serious injury is healed, hemorrhage is controlled or acute anemia improves.  
**Second-trimester abortion:** Insertion should be delayed for 6 weeks unless equipment and expertise for immediate postabortal insertion are available. | - Can be inserted immediately after PAC if no evidence of hemorrhage or severe anemia  
- Is highly effective  
- Provides long-term contraceptive protection  
- Allows immediate return to fertility upon removal  
- Does not interfere with intercourse  
- Does not require client to obtain supplies  
- Requires only monthly checking for strings (by client)  
- Requires only one follow-up visit, unless there are problems | - May increase menstrual bleeding and cramping during the first few months  
- Can result in uterine perforation during insertion  
- May increase risk of PID and subsequent infertility for women who have chlamydia or gonorrhea infection at the time of insertion  
- Necessitates condom use if client is at risk for STIs, including HIV  
- Requires a trained provider to insert and remove |
### Method Comparison

<table>
<thead>
<tr>
<th>Method</th>
<th>Timing Postabortion</th>
<th>Advantages</th>
<th>Other Characteristics</th>
</tr>
</thead>
</table>
| **Female sterilization**       | Sterilization after a first-trimester abortion is similar to an interval procedure; sterilization after a second-trimester abortion is more similar to a postpartum procedure. Technically, sterilization procedures usually can be performed immediately after treatment of postabortion complications, unless infection or severe blood loss is present. Sterilization should not be performed until an infection is fully resolved (3 months) or an injury healed. | ▪ Is a permanent method  
▪ Is the most effective female method  
▪ Requires no further action once completed  
▪ Does not interfere with intercourse  
▪ Produces no change in sexual functioning  
▪ Causes no long-term side effects  
▪ Is immediately effective | ▪ Requires adequate counseling and fully informed consent before being performed, which is often not possible at the time of emergency care  
▪ Has slight possibility of surgical complications  
▪ Requires trained staff and appropriate equipment  
▪ Necessitates condom use if client is at risk for STIs, including HIV |
| **Natural family planning or fertility awareness methods (Standard Days Method®, ovulation method)** | Natural family planning is not recommended for immediate postabortion use. The first ovulation after an abortion will be difficult to predict, and the method is unreliable until after a regular menstrual pattern has returned. | ▪ Is associated with no cost  
▪ Produces no change in sexual function  
▪ Has no long-term side effects | ▪ Is difficult to use immediately after abortion  
▪ Necessitates use of alternative methods until normal cycles have returned  
▪ Requires extensive instruction and counseling  
▪ Necessitates condom use if client is at risk of STIs, including HIV  
▪ Requires the woman and her partner to have continued motivation and thorough understanding of how to use the method |
### Dual Protection

Though family planning methods protect against pregnancy, few methods provide effective protection against HIV and other STIs. Dual protection achieves prevention of both STIs/HIV and unplanned pregnancy. There are two main ways to practice dual protection:

- Condoms alone for pregnancy prevention and protection against STIs (condoms alone are not the most effective contraceptive method)

- Condoms with another family planning method (such as oral contraceptives or an injectable) to improve effectiveness in preventing pregnancy and the transmission of STIs and HIV infection

The primary goal of dual protection—whether to prevent pregnancy, infection or both—will influence which dual protection approach a woman should use. If, for example, the goal is primarily to prevent pregnancy, dual method use may be appropriate, especially if she is not able to use condoms correctly and consistently. On the other hand, if prevention of infection is the primary concern, condoms alone may be a good choice. Providers need to help PAC clients determine their risks and goals and select the best form of dual protection for their needs.

### Simple Answers to Clients’ Questions about Postabortion Family Planning

**When can I resume sexual activity?**

After your bleeding has stopped (bleeding stops in about five to seven days).

**How soon can I become pregnant?**

Almost immediately—even before your next period. It is possible to become pregnant as soon as 11 days after this treatment.

**How can I avoid becoming pregnant again?**

Start using a modern family planning method right away.
Which method can I use right away?
Discuss all available methods with your provider (include your partner, if you wish) to decide which methods may be right for you. If you are otherwise healthy and free of infection, the family planning methods that are safe immediately after incomplete abortion include:

- Condoms
- Oral contraceptives ('the pill”)
- Injectables
- Implants
- Diaphragm or cervical cap
- IUD
- Male or female voluntary surgical contraception

Note: Only condoms and abstinence provide protection against STIs and HIV. For this reason, it is advisable to use condoms with all other methods to protect against both pregnancy and STIs (dual method use).

I had a miscarriage and want to become pregnant again soon—which methods are right for me?
In order to give your body the rest it needs and to make sure the next pregnancy is healthy, it is strongly recommended that you wait at least six months before becoming pregnant again. You can use any temporary or long-acting method to space your pregnancies and help reduce the risk of repeat miscarriage. However, with some methods there may be a delay in the return of fertility once you stop using them, so you may want to take that into consideration when selecting your method and/or when timing your next pregnancy. Short-acting temporary methods include barrier methods, pills and injectables. Long-acting methods that can be used include implants and the IUD.

The GATHER Method of Counseling
Counseling about family planning and other reproductive health matters often has six elements. You can remember the six elements with the letters in the English word GATHER. Or you can find words in other languages to help you remember.

Remember that all PAC counseling should suit each client. Not all clients need to be counseled in this order and not all clients need all six GATHER elements. Some will need an element repeated. Counseling should change to fit the client’s needs.

Counseling often has six elements or steps. Each letter in the word GATHER stands for one of these elements. Effective counseling, however, is more than covering the GATHER elements. A skilled counselor also understands the client’s feelings and needs. With this understanding, the counselor adapts counseling to suit each client.
G — Greet (Greet clients)

- Give clients your full attention as soon as you meet them.
- Be polite, friendly and respectful: greet clients, introduce yourself and offer them seats.
- Ask how you can help.
- Tell clients that you will not tell others what they say.
- Explain what will happen during the visit.
- Conduct counseling where no one else can hear.

A — Ask (Ask clients about themselves)

- Ask clients about their reasons for coming.
- Help clients decide what decisions they face.
- Help clients express their feelings, needs, wants and any doubts, concerns or questions.
- Ask clients about their experience with the reproductive health matter that concerns them.
- Keep questions open, simple and brief. Look at your client as you speak.
- Ask clients what they want to do.
- Listen actively to what the client says. Follow where the client leads the discussion.
- Show your interest and understanding at all times. Express empathy. Avoid judgments and opinions.
- Ask for any information needed to complete client records.

T — Tell (Tell clients about their options)

- Help clients understand their possible options.
- Information should be tailored—that is, important to the client’s decision.
- Information should be personalized—that is, put in terms of the client’s own life.
- If clients are choosing a family planning method:
  - Ask which methods interest them. Clients should get the methods they want if available and no medical reason prevents it.
  - Ask what they know about these methods. (If a client has important information wrong, gently correct the mistake.)
  - Briefly describe the client’s preferred method. Be sure to talk about:
    - Effectiveness as commonly used,
    - Briefly, how to use the method,
    - Characteristics, including possible side effects and complications, and
    - Danger or caution signs.
Use samples and other audiovisual materials if possible.

Mention other available methods that the client might want to use now or later.

Explain that condoms are the only family planning method that offers reliable protection against STIs.

**H — Help (Help clients choose)**

- Tell clients that the choice is theirs. Offer advice, but avoid making the clients’ decisions for them.
- To help clients choose, ask them to think about their plans and family situations.
- Help clients think about the results of each possible choice.
- Ask what the client’s partner might want.
- Ask if the client wants anything made clearer. Reword and repeat information as needed.
- Explain that some family planning methods may not be safe for clients with certain medical conditions. Once a client makes a choice, ask about these conditions or perform a clinical exam if necessary and share the results with the client. If a method would not be safe, clearly explain why. Then help the client choose another method.
- Check whether the client has made a clear decision. Specifically ask, “What have you decided to do?” Wait for the client to answer.

**E — Explain (Explain what to do)**

- After the client has made a choice:
  - Give supplies, if appropriate.
  - If the method or services cannot be given at once, tell the client how, when and where they will be provided.
  - For voluntary sterilization, the client may have to sign a consent form. The form says that the client wants the method, has been given information about it and understands that information. Help the client understand the consent form before signing.
  - Explain how to use the method or follow other instructions. As much as possible, show how and have the client return the demonstration to confirm understanding.
  - Describe possible side effects and what to do if they occur.
  - Explain when to come back for routine follow-up or more supplies, if needed.
  - Explain any medical reasons to return.
  - Ask the client to repeat instructions. Make sure the client remembers and understands.
  - If possible, give the client printed material to take home.
  - Tell clients to come back whenever they wish, if they develop side effects of danger signs for their method, or if there are medical reasons to return.
**R — Return** (Return for follow-up)

- At a follow-up visit:
  - Ask if the client has any questions or anything to discuss. Treat all concerns seriously.
  - Ask if the client is satisfied. Have there been problems?
  - Help the client handle any problems.
  - Ask if any health problems have come up since the last visit. Check if these problems make it better to choose another method or treatment. Refer clients who need care for health problems.
  - Check if the client is using the method or treatment correctly.
  - Check whether the client might need STI protection now or voluntary counseling and testing for HIV.
  - If a client is not satisfied with a temporary family planning method, ask if she or he wants to try another method. Help the client choose another method, and explain how to use it. Remember—changing methods is normal. No one really can decide on a method without trying it. Also, a person’s situation can change, making another method a better choice.
  - If a woman wants her IUD or implants taken out, arrange for this. If she plans pregnancy, suggest where to get prenatal care and voluntary counseling and testing to prevent possible mother-to-child transmission of HIV.

**The REDI Model of Family Planning Counseling**

The REDI framework was initially developed to avoid losing family planning content during counseling when integrating with other services (such as HIV/AIDS). The four main components are:

- Rapport-building with the client
- Exploration of the client’s needs, situation
- Decision-making with the client
- Implementing the decision and helping the client develop an action plan

The REDI framework is suitable for sexual-reproductive health/PAC counseling in the following ways: it emphasizes the client’s responsibility for making a decision and for carrying it out; it provides guidelines for considering the client’s sexual relationship(s) and social context; and it addresses the challenges that a client may face in carrying out this decision and offers skills development to help clients meet these challenges.

A crucial point to remember about counseling models is that the client is more important than the framework. Frameworks can be helpful to providers in giving a structure for talking with the client so that you do not miss critical steps. Too often, though, the provider may focus more on following the steps than on responding to what the client is saying. The most important aspect of counseling is to figure out first what the client needs and then how to help him or her meet those needs.
REDI provides a useful framework, but that does not mean it must be followed exactly or in sequential order during a counseling session. REDI is merely a suggested guide of steps and topics to cover while the provider and client engage in an interactive, two-way discussion of the client’s needs, desires and method eligibility.

Table 3.1-4: REDI Framework (Short Version)

<table>
<thead>
<tr>
<th>Phase 1: Rapport-Building</th>
<th>Phase 2: Exploration</th>
<th>Phase 3: Decision-Making</th>
<th>Phase 4: Implementing the Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Welcome the client</td>
<td>▪ Explore the client’s needs, risks, sexual life, social context and circumstances and reproductive intentions/desires</td>
<td>▪ Identify what decisions the client needs to make in this session</td>
<td>▪ Make a concrete, specific plan for carrying out the decision</td>
</tr>
<tr>
<td>▪ Make introductions</td>
<td>▪ Assess the client’s knowledge and give information as needed</td>
<td>▪ Identify the client’s options for each decision</td>
<td>▪ Identify skills that the client will need to carry out the decision</td>
</tr>
<tr>
<td>▪ Introduce the subject of sexuality</td>
<td>▪ Assist the client to perceive or determine her own pregnancy or HIV/STI risk</td>
<td>▪ Weigh the benefits, disadvantages and consequences for each action</td>
<td>▪ Practices skills as needed with the provider’s help</td>
</tr>
<tr>
<td>▪ Assure confidentiality</td>
<td></td>
<td></td>
<td>▪ Make a plan for follow-up</td>
</tr>
</tbody>
</table>

**WHO Medical Eligibility Criteria**

The WHO Medical Eligibility Criteria (MEC) offer guidance on the safety of the use of 19 different methods for women and men with specific characteristics or known medical conditions. It does not provide rigid guidelines, but rather gives recommendations that provide a basis for safely providing contraceptives for clients with certain health conditions.

In general, the purpose of the MEC is:

- To guide family planning practices based on the best available evidence
- To address and change misconceptions about who can and cannot safely use contraceptive methods
- To reduce medical policy and practice barriers (i.e., not supported by evidence)
- To improve quality, access and use of family planning services

The conditions affecting eligibility for each method are classified under one of four categories shown in the table below.
Table 3.1-5: Classification for Use of Contraceptive Methods

<table>
<thead>
<tr>
<th>Classification</th>
<th>With Clinical Judgment</th>
<th>With Limited Clinical Judgment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use the method in any circumstance</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Generally use: advantages outweigh the risk</td>
<td>YES Use the method</td>
</tr>
<tr>
<td>3</td>
<td>Generally do not use: risks outweigh advantages</td>
<td>NO Do not use the method</td>
</tr>
<tr>
<td>4</td>
<td>Method not to be used</td>
<td></td>
</tr>
</tbody>
</table>


Categories 1 and 4 are self-explanatory. Classification of a method/condition as category 2 indicates the method can be generally used, but careful follow-up may be required. However, provision of a method to a woman with a condition classified as category 3 requires careful clinical judgment and access to clinical services; for such a woman, the severity of the condition and the availability, practicality and acceptability of alternative methods should be taken into account. For a method/condition classified as category 3, use of that method is usually not recommended unless other more appropriate methods are not available or acceptable. Careful follow-up will be required. When resources for clinical judgment are limited, such as in community-based services, the four-category framework can be simplified into two categories. With this simplification, a classification of category 3 indicates that a woman is not medically eligible for this method.

The MEC is available for download in seven languages at:
http://www.who.int/reproductivehealth/publications/family_planning/9789241563888/en/

The MEC wheel—an easy-to-use reference for providers—is a job aid developed to help providers quickly identify the eligibility criteria relevant to their clients. This useful tool can be downloaded at the above Web site or at www.postabortioncare.org. It is also attached below. Note that it will need to be cut out, placed on cardboard and assembled for use.
The WHO Medical Eligibility Criteria Wheel

Bottom wheel, front
Conditions that are category 1 and 2 for all methods (method can be used)

- Age 18–39
- Anemias, including sickle-cell disease and thalassemia
- Benign ovarian tumors, including cysts
- Breast disease: family history, benign breast disease and undiagnosed mass
- Depression
- Dysmenorrhea
- Endometriosis
- Epilepsy
- High risk for HIV
- History of gestational diabetes
- History of high blood pressure during pregnancy
- History of pelvic surgery, including caesarean section
- Irregular, heavy or prolonged menstrual bleeding
- Malaria
- Mild cirrhosis
- Past ectopic pregnancy
- Post-abortion (no sepsis)
- Schistosomiasis (bilharzia)
- Surgery without prolonged immobilization
- Taking antibiotics (excluding rifampicin/isonicotin)
- Thyroid disorders
- Tuberculosis (but if pelvic, cannot use IUD)
- Uncomplicated valvular heart disease
- Varicose veins
- Viral hepatitis (carrier or chronic)

Notes to the conditions

A. Can insert copper IUD < 48 hrs after delivery or ≥ 4 weeks.
B. If she had no subsequent pregnancy, IUD = 2.
C. Or other forms of puerperal cervicitis.
D. If she develops this condition while using the IUD, she can keep using it during treatment.
E. If at increased risk of STIs or HIV, advise condom use.
F. If very high likelihood of exposure to gonorrhea or chlamydia = 3.
G. If on ARV Therapy = 2, except ritonavir-boosted ARVs = 3.
H. AIDS, but not clinically well on ARV Therapy = 3 for insertion.
I. COCs and heavy smoking = 4, COCs and light smoking = 2.
J. If blood pressure cannot be measured, and she has no known history of hypertension, all methods can be used.
K. The same category applies to controlled hypertension.
L. Risk factors include: older age, smoking, diabetes, hypertension.
M. To check if migraine has aura, ask: “Do you see a bright spot in your vision before bad headaches?”
N. Migraine without aura and < 35 years old, COCs and COCs = 2.
N. Migraine without aura and > 35 years old, COCs and COCs = 3.
O. For complicated diabetes, or having diabetes for more than 20 years, COCs, COCs, DMPP and NET-EN = 3–4.
P. COCs = 3; COCs = 2.
Q. Phenytoin, carbamazepine, barbiturates, primidone, topiramate, oxcarbazepine. For lamotrigine COCs/COCs = 3. Other methods = 1.
R. If she is not clinically well, IUD = 3.
S. If the uterine cavity is distorted, cannot use IUD.
T. > 45 yrs. = 2.
U. If established on anticoagulant therapy = 2.
V. DMPP = 1; NET-EN = 2.
Top wheel

WHO Medical Eligibility Criteria Wheel for contraceptive use (2008 update)

This wheel contains medical eligibility criteria for starting use of selected contraceptive methods. It is based on WHO’s guideline Medical Eligibility Criteria for Contraceptive Use, 3rd edition, 2004 and its 2008 Update.
FAMILY PLANNING: A KEY COMPONENT OF POST ABDUCTION CARE

Consensus Statement: International Federation of Gynecology and Obstetrics (FIGO), International Confederation of Midwives (ICM), International Council of Nurses (ICN), and the United States Agency for International Development (USAID)

25 September 2009

“If the woman we treat for post abortion complications is there because she could not get contraception, we have failed her. If she leaves without family planning we have failed her twice.” (1994, Postabortion Care (PAC) Consortium, International Conference on Population and Development (ICPD), Cairo)

BACKGROUND

Of the 205 million pregnancies each year worldwide, 80 million are unplanned. Of these, 42 million are terminated – 22 million legally and 20 million illegally. Unsafe abortion accounts for 13% of maternal deaths worldwide and as much as 25% in some countries.

Women usually seek abortion for a variety of reasons, including limiting family size, delaying childbearing or contraceptive failure, lack of access to contraceptives, or as a result of rape. Unmet need for family planning is the root cause for induced abortion, legal or illegal? Women who had an induced abortion are at special risk of repeat induced abortions. For these and all women, family planning should be voluntary, readily available, and information should be comprehensible and concise.

Many women do not receive immediate post abortion family planning services, even though they are at risk of pregnancy within two to three weeks. Additionally, 31 million women have spontaneous abortions each year. While many of these

Key Consensus Points

- Globally, one in three pregnancies – more than 70 million – end in abortion, spontaneous or induced.
- Unmet need for family planning is a primary cause of induced abortion.
- Post-abortion women are at risk of repeat pregnancy in two to three weeks post procedure.
- All post-abortion women should receive voluntary post abortion family planning counseling.
- A wide range of contraceptive methods, including long-acting methods, should be offered and accompanied by simple written instructions.
- Post abortion family planning uptake is high when quality services are offered before discharge.
- Provision of universal access to post abortion family planning should be a standard of practice for doctors, nurses, and midwives.
- Reorganizing services can save costs, staff time, and lives.
- FIGO, ICM, and ICN health professionals have a special advocacy role with policymakers and governments for ensuring quality post abortion family planning services, sharing responsibilities, strengthening professional education, and improving health outcomes.
women desire to replace the pregnancy that was lost, experts recommend birth spacing of six months after a spontaneous abortion of a desired pregnancy for optimal pregnancy outcomes.\textsuperscript{7}

Therefore, all women should receive counseling and family planning services after any abortion – spontaneous or induced – irrespective of the pregnancy termination or evacuation procedure used.

**Family planning uptake high in the immediate post abortion period**

When family planning counseling and services are offered after all types of post abortion treatment, acceptance is high. Numerous studies have shown that when attention is paid to programming that includes contraceptive technology updates to providers; reorganization of services to allow post abortion family planning counseling and provision of methods prior to discharge from the facility; and ensuring that contraceptives are available at the point of service delivery, post abortion contraception acceptance rates can increase rapidly, from 0–10% prior to program interventions to 50–80% within one to two years after implementation.\textsuperscript{7} Therefore, family planning methods need to be provided at the point of post abortion services before the patient leaves the facility.

**Women who have compelling needs**

Women who have induced abortions are conveyng – some at the risk of death – how strongly they want to avoid pregnancy and childbirth. Health providers have a special opportunity and obligation to provide effective family planning services. Skilled counseling is especially important for younger women whose first interaction with the health system may be for post abortion care services. Caring providers are needed to support all women who have undergone an induced abortion in making the best decisions for their health and to take appropriate action. The post abortion period is a vulnerable time and provides an opportunity for health professionals to have a major impact on reproductive health outcomes.\textsuperscript{9

**Costs decrease and staff time optimized**

Providing post abortion family planning to prevent repeat abortion makes financial sense for both the individual and the institution (e.g., saving staff time).\textsuperscript{9} For example, in Nigeria, where safe abortion is very limited, the cost of treatment for complications of abortion is four times higher than the cost of providing family planning services to prevent these abortions.\textsuperscript{10} In 12 countries in Central Asia and Eastern Europe, total abortion rates dropped dramatically as use of effective contraceptives increased.\textsuperscript{10}

**Vision for universal access to post abortion family planning**

The International Federation of Gynecology and Obstetrics, the International Confederation of Midwives, and the International Council of Nurses are committed to ensuring that our members advocate for high-quality post abortion family planning counseling and services. Universal access to post abortion and postpartum family planning makes good sense and must be considered as an important element of our care based on the clear evidence that family planning and pregnancy spacing reduce unintended pregnancies and the need for abortion and lower morbidity and mortality of women, neonates, infants, and children.

The provision of universal access to post abortion family planning should be a standard of practice for doctors, nurses, and midwives in public and private health care. We will collaborate fully across our professions to optimize the provision of post abortion family planning.
INTERVENTIONS NEEDED

Reorganization of services
There is strong evidence that the reorganization of services to provide post abortion treatment and family planning counseling and services 24 hours a day, seven days per week, improves the uptake of post abortion family planning. Several different service delivery approaches have proven successful. These include:

a. Having institutions provide separate space for post abortion care, including family planning counseling and services before the woman leaves the facility

b. Using nurses and ward staff to counsel women

c. Training physicians and midwives together as teams to provide post abortion care

d. Including men in family planning decision-making by providing family planning counseling to couples

Providing a wide range of family planning methods for post abortion clients
Effective systems need to be in place to ensure an adequate supply and wide range of contraceptive methods, including temporary and long-acting methods, in treatment rooms. Most family planning methods can be initiated in the immediate post abortion period. Training and employing more midwives and nurses in provision of long-acting family planning methods will strengthen access to a full range of methods.

Contraceptive counseling for clients having HIV counseling and testing post-procedure
In settings where there is high HIV or STI prevalence, post abortion counseling and services should be linked with HIV and STI screening and treatment programs and include condom counseling.

Contraceptive continuation post-procedure
To reinforce contraceptive continuation, women should be provided with a plan for obtaining ongoing contraception supplies and/or follow-up visits. They should receive simple written instructions for the use of their method, along with concise information about common side effects and benefits.

Leadership by health care professionals to increase access to post abortion family planning
Doctors, midwives, and nurses have a special role in advocating for women who have had an abortion and in ensuring that quality post abortion family planning services are provided. Leadership is needed from FIGO, ICM, and ICN to ensure optimal practices for post abortion family planning counseling and services, including appropriate sharing of responsibilities among doctors, midwives, nurses, and community health workers. Strengthening pre-service education for physicians, midwives, and nurses will better prepare them to provide family planning counseling and services. Policymakers and governments need to hear the voices of health professionals and to consider the evidence that supports improved professional education, the reorganization of services, and the provision of family planning, especially in the same location as the post abortion service. When quality of care is improved, lives are preserved; staff time is saved; costs are lowered; and all benefit.
References


Additional evidence-based resources are available at the Global Postabortion Care Web site at www.postabortioncare.org.


6 Ibid.

7 Ibid.


9 Ibid.

10 Ibid.


12 An online training module is available for those providing reproductive health services to youth and young adults. At: http://www.fhi.org/en/Youth/YouthNet/rhtrainmat/Reprohealthyoungadults.htm. EngenderHealth also offers a manual on Youth Friendly Services that can be downloaded at: http://www.engenderhealth.org/res/offc/qi/yfs/index.html.


14 Detailed resources for IUD information and training are available at: www.iudtoolkit.org.


Family Planning Counseling and Service Provision, STI Evaluation and Treatment, and HIV Counseling and/or Testing

STI and HIV Service Provision

*Note:* This session should be included in the training only if the country has high STI and/or HIV prevalence, has the resources (human and financial) to include STI evaluation and HIV counseling and/or referral for HIV testing, and the government has decided to include training in STI evaluation and HIV counseling and/or referral for HIV testing as a part of PAC training. In the overall schedule for training, two hours and 15 minutes have been dedicated to this session. If this session will not be included in the PAC training, it is recommended that the allotted time be used for family planning counseling.

**Summary**
This session provides an overview for PAC providers about STI evaluation, treatment using the syndromic approach and referral. The section on HIV/AIDS focuses on information for counseling and referral to appropriate services for testing, care and treatment.

*Acknowledgment:* Much of the information in this chapter was adapted or used directly from the EngenderHealth Sexually Transmitted Infection online mini-course (EngenderHealth 2005), *WHO Guidelines for the Management of Sexually Transmitted Infections* (WHO 2003) and *Sexually Transmitted and Other Reproductive Tract Infections* (WHO 2005).

**Session Objectives**
At the end of this session, participants will be able to:

1. Describe the symptoms and complications of common STIs and HIV/AIDS
2. List the essential information that all postabortion clients must have about STIs before they leave the health facility
3. Explain how to evaluate, treat and follow up clients with STIs using the syndromic approach
4. Provide counseling within the context of STI/HIV risk

**Sexually Transmitted Infections**
Sexually transmitted infection (STI) refers to an infection that is passed from person to person by sexual contact. STIs are part of a broader group of infections known as reproductive tract infections (RTIs). Not all RTIs, however, are caused by sexual contact; some may be the result of an overgrowth of bacteria and other organisms that normally live in the vagina. While some RTIs may cause only mild discomfort, others can be very serious. The presence of any infection that causes irritation of the skin in and around the vagina increases the possibility of infection with HIV, the virus that causes AIDS.
HIV infection is not covered extensively in this document, as there are numerous resources that address the subject. Though HIV can technically be an STI, it is not an RTI. Hepatitis B and C are other examples of STIs that are not RTIs, and are not covered in this document. For information on HIV and hepatitis infections, diagnosis and treatment, refer to local guidelines or to one of the resources listed at the end of this session.

Presenting Symptoms

When a PAC client reports reproductive tract symptoms (pain, itching, swelling, sores, discharge), the counselor should remember that not all infections of the genitals or reproductive tract are the result of sexual contact. Telling a client that he or she has a sexually transmitted disease can have serious negative consequences for the client and his or her sexual partners. Before giving a client such a diagnosis, the counselor must be sure of it. Common infections that can be spread by sexual contact include:

- Gonorrhea
- Syphilis
- HIV
- Chlamydia
- Trichomoniasis
- Herpes
- Human papillomavirus (genital warts and cervical dysplasia)

When PAC and other clients present for health services, be alert to the STI symptoms outlined in the following table. Having one of these symptoms does not necessarily mean the presence of an STI, but if any of the following symptoms are present, further evaluation is essential. Note that in some viral infections (HIV, HPV and herpes simplex virus [HSV]) people may not be symptomatic. Women who have chlamydia may not have symptoms.

<table>
<thead>
<tr>
<th>Presenting Symptom</th>
<th>Possible Causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unusual vaginal discharge*</td>
<td>Bacterial vaginosis, chlamydia, gonorrhea, herpes, PID, trichomoniasis, yeast infection</td>
</tr>
<tr>
<td>Penile discharge</td>
<td>Chlamydia, gonorrhea, trichomoniasis</td>
</tr>
<tr>
<td>Abnormal and/or heavy vaginal bleeding</td>
<td>Chlamydia, gonorrhea, PID</td>
</tr>
<tr>
<td>Bleeding after intercourse</td>
<td>Chlamydia, gonorrhea, PID</td>
</tr>
<tr>
<td>Burning or pain during urination</td>
<td>Chlamydia, gonorrhea, herpes, trichomoniasis</td>
</tr>
<tr>
<td>Pelvic pain (pain below the umbilicus)</td>
<td>Chlamydia, gonorrhea, PID</td>
</tr>
<tr>
<td>Swollen and/or painful testicles</td>
<td>Chlamydia, gonorrhea</td>
</tr>
<tr>
<td>Itching or tingling in the genital area</td>
<td>Bacterial vaginosis, herpes, trichomoniasis, yeast infection</td>
</tr>
</tbody>
</table>
### Presenting Symptom vs. Possible Causes

<table>
<thead>
<tr>
<th>Presenting Symptom</th>
<th>Possible Causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blisters or sores on the genitals, anus or surrounding areas</td>
<td>Herpes, syphilis</td>
</tr>
<tr>
<td>Warts or bumps on the genitals, anus or surrounding areas</td>
<td>HPV</td>
</tr>
<tr>
<td>Persistent vaginal yeast infections</td>
<td>HIV infection/AIDS</td>
</tr>
<tr>
<td>Yellowing of the eyes and skin (jaundice)</td>
<td>Hepatitis B and hepatitis C</td>
</tr>
</tbody>
</table>


*Although women may normally have some vaginal discharge, an RTI can lead to changes in normal vaginal discharge (such as changes in color, consistency, amount and odor), in addition to vaginal itching, burning or pain.*

### Symptoms, Complications and Treatment¹ of Common STIs

#### Cervical Infections

The cervix is the most common site of infection for gonorrhea and chlamydia. Infections of the cervix are often asymptomatic. However, upon careful speculum examination, it may be possible to detect signs of infection, even when the client has no symptoms. Despite lack of symptoms, a cervical infection can be severe if it reaches the upper reproductive tract. Therefore, **when cervical infection is suspected, treat for both gonorrhea and chlamydia.**

**Chlamydia**

Caused by *Chlamydia trachomatis*, chlamydia is one of the most common STIs, especially among adolescents. About 75% of women and up to 50% of men have no symptoms. Left untreated, chlamydia can increase the risk of transmitting or acquiring the HIV virus.

**Symptoms**

- Women with chlamydia often have no symptoms of infection. Some women notice an unusual vaginal discharge or bleeding after intercourse or between menstrual periods.

- Symptoms in men usually include a clear discharge from the penis and burning with urination or swollen and tender testicles. Many men have no symptoms.

- The same bacteria that cause symptoms of chlamydia can also cause another infection called LGV (lymphogranuloma venereum). The symptoms in LGV include genital sores (ulcers) and swollen lymph nodes (buboes).

**Complications**

- In women, untreated or inadequately treated chlamydia can spread into the pelvic area and infect the uterus, fallopian tubes and ovaries (see section on PID below).

- In men, chlamydia can affect the testicles and cause sterility. The symptoms of chlamydia are a discharge from the penis, pain or burning with urination, or swollen and tender testicles. Some men have no symptoms.

- Chlamydia can pass from the mother to her baby during birth, infecting the baby’s eyes and possibly causing serious damage or even blindness.
Chlamydia Treatment (Choose ONE):
Treatment of choice:
- Azithromycin, 1g by mouth as a single dose, OR
- Doxycycline, 100 mg by mouth two times daily for seven days (Do NOT give to pregnant or breastfeeding women.)

Alternative treatment:
- Erythromycin, 500 mg by mouth four times a day for seven days, OR
- Ofloxacin, 300 mg by mouth twice a day for seven days, OR
- Tetracycline, 500 mg by mouth four times daily for seven days (Do NOT give to pregnant or breastfeeding women.)

If the woman is pregnant, breastfeeding or less than 16 years of age:
- Erythromycin, 500 mg by mouth four times daily for seven days, OR
- Azithromycin, 1 g by mouth as a single dose, OR
- Amoxicillin, 500 mg by mouth three times daily for seven days

Gonorrhea
The bacteria that cause gonorrhea, Neisseria gonorrhoeae, grow in the warm, moist parts of the body, such as the urethra, the cervix, the rectum and the throat (throat infection can occur following oral-genital sex with an infected partner).

Symptoms
- In women, symptoms include purulent vaginal discharge, or pain and burning on urination. Often the discharge is not clear and yellowish-green (sometimes called mucopurulent). About 50% of women have no noticeable signs or symptoms.
- In men, the symptoms of gonorrhea are a cloudy or pus-like discharge from the penis, pain or burning with urination, or swollen and tender testicles. Some men have no symptoms.
- Gonorrhea infections in the rectum often have no symptoms, but gonorrhea in the throat may cause a sore throat.

Complications
- In women, untreated or inadequately treated gonorrhea can spread into the pelvic area and infect the uterus, fallopian tubes and ovaries. Symptoms include abdominal or lower back pain, pain during intercourse, bleeding between periods and fever. Pelvic infection can be a very serious condition and requires immediate medical care. It may cause enough damage to the women’s reproductive organs that she becomes sterile.
- In men, gonorrhea can infect the epididymis, which is where sperm are stored. The resultant epididymitis can lead to infertility.
Gonorrhea can be passed from mother to baby during birth. Without prompt treatment, the infant’s eyes can be seriously damaged, even resulting in blindness.

**Treatment**
- If possible, test or refer patient to a convenient place for test and treatment. (The gonorrhea test alone is useful because it may rule out that disease.) If not possible to test, both gonorrhea and chlamydia infection can be treated at the same time.

**Gonorrhea Treatment (Choose ONE)**

**Treatment of choice:**
- Ceftriaxone, 125 mg intramuscular injection as a single dose, OR
- Cefixime, 400 mg by mouth as a single dose

**Alternative treatment:**
- Ciprofloxacin, 500 mg tablet by mouth as a single dose *(Do NOT give to pregnant or breastfeeding women.)* OR
- Spectinomycin, 2 g intramuscular injection as a single dose
- If woman is pregnant, breastfeeding or less than 16 years of age:
  - Ceftriaxone, 125 mg intramuscular injection as a single dose, OR
  - Cefixime, 400 mg by mouth as a single dose

Treatments that may be useful in countries where the disease is not commonly resistant to these medications are:
- Kanamycin, 2 g intramuscular injection as a single dose, OR
- Trimethoprim, 80 mg/sulphamethoxazole, 400 mg; 10 tablets by mouth daily for three days *(Do NOT give to pregnant or breastfeeding women.)*

**Pelvic Inflammatory Disease**
Pelvic inflammatory disease is an infection of the internal female organs, usually affecting the uterus, one or both fallopian tubes, the ovaries and surrounding pelvic tissues. These tissues become inflamed, irritated and swollen. PID is caused by several types of bacteria and other microorganisms. Chlamydia causes nearly half of all cases of PID; gonorrhea is the other cause of a large percentage of PID cases.

**Symptoms**
The primary symptom of PID is lower abdominal or pelvic pain. In mild cases, there may be only slight cramping, while in severe cases the pain may be intense. Physical activity, especially sexual intercourse, may greatly increase the pain. Abnormal vaginal bleeding (extremely heavy menstrual periods or bleeding or spotting between periods) is a very common symptom. Abnormal vaginal discharge and fever may also be present.
Complications
The complications of PID can be very serious. They include:

- Repeat PID:
  - Women who have had PID in the past are very likely to get it again if they are at risk of STIs.

- Pelvic abscess:
  - This local collection of pus in the pelvis is formed by the breakdown of tissues. It is found in severe cases of PID. Pelvic abscess requires hospitalization and intravenous antibiotic treatment; it also often requires surgery.

- Infertility:
  - When PID heals, scar tissue can form around the pelvic organs. This scar tissue can cause blockage and distortion of the fallopian tubes. The result is that the egg cannot get through the tube and into the uterus. After one episode of PID, a woman has an estimated 15% chance of infertility. After two episodes, the risk of infertility increases to approximately 35%, and after three, the risk is nearly 75%.

- Chronic pelvic pain:
  - Besides causing infertility, the scar tissue associated with PID may produce chronic pelvic pain or discomfort because of the distortion of the pelvic organs. Surgery may be required in severe cases.

- Ectopic pregnancy:
  - An ectopic pregnancy occurs outside the uterus, most commonly in the fallopian tubes. Because PID can cause partial blocking or distortion of the fallopian tubes, the chances of an ectopic pregnancy are greatly increased in a woman who has had PID. An ectopic pregnancy is a very serious condition and must be surgically removed.

- PID treatment:
  - Treat for gonorrhea, chlamydia and trichomonas as outlined below.
Table 3.2-2: Recommended Outpatient Treatment for PID

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Choose one from each box (= 3 drugs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gonorrhea</strong></td>
<td>- ceftriaxone 250 mg by intramuscular injection, or</td>
</tr>
<tr>
<td></td>
<td>- cefixime 400 mg orally as a single does, or</td>
</tr>
<tr>
<td></td>
<td>- ciprofloxacin 500 mg orally as a single does, or</td>
</tr>
<tr>
<td></td>
<td>- spectinomycin 2 g by intramuscular injection</td>
</tr>
<tr>
<td><strong>Chlamydia</strong></td>
<td>- doxycycline 100 mg orally twice a day for 14 days, or</td>
</tr>
<tr>
<td></td>
<td>- tetracycline 500 mg orally 4 times a day for 14 days</td>
</tr>
<tr>
<td><strong>Anaerobes</strong></td>
<td>- metronidazole 400–500 mg orally, twice a day for 14 days</td>
</tr>
</tbody>
</table>

*When using these drugs, consider Neisseria gonorrhoeae resistance such as in some parts of Southeast Asia and Western Pacific.

a Contraindicated for pregnant and breastfeeding women.

b Patients taking metronidazole should avoid consuming alcohol; also avoid metronidazole during the first trimester of pregnancy.

Genital Ulcers

The most common genital ulcer diseases are genital herpes, chancroid and syphilis. Differential diagnosis of genital ulcers using clinical features is often inaccurate, especially where several types of genital ulcer disease are common. Clinical manifestations and patterns of genital ulcer disease may be different in people with HIV infection.

If the exam confirms the presence of genital ulcers, treat (as per local protocol) at the initial visit, if possible. For example, in areas where both syphilis and chancroid are prevalent, treat patients with genital ulcers for both conditions to ensure adequate therapy in case they do not return for follow-up.

In many parts of the world, genital herpes (HSV-2) has become the most frequent cause of genital ulcer disease. Where HIV infection is prevalent, an increasing proportion of genital ulcer disease is likely to be due to herpes simplex virus. Herpes (and other ulcerative STIs in general) in HIV-infected patients may persist for a long time. Though there is no cure for HSV-2, treatment with antivirals, such as acyclovir, can shorten the duration of active disease and may help reduce transmission. In places where these drugs are scarce, reserve treatment for patients with severe HSV-2 or herpes zoster infection, both of which are associated with HIV infection.

Laboratory diagnosis of genital ulcer disease is rarely useful at the initial client visit and may even be misleading. In areas of high prevalence of syphilis, a person may have a reactive serological test from a previous infection, even when chancroid or herpes is the cause of the present ulcer.
Management of Genital Ulcers
Although specific treatment is outlined below for the various genital ulcers, WHO recommendations for the general management of a patient presenting with signs of genital ulcers include:3

- Treat for syphilis and chancroid (both men and women).
- Provide genital herpes management, including HSV-2 treatment, where HSV-2 prevalence is 30% or greater.
- Follow local guidelines on adding treatment for granuloma inguinale and/or lymphogranuloma venereum.
- Advise patient on basic care of the lesion (keep clean and dry) and general hygiene (especially handwashing and after touching or bathing genital area).
- Refer for aspiration of any fluctuant glands (avoid surgical incision).
- Educate and counsel on compliance with treatment and risk reduction.
- Promote and provide condoms.
- Offer HIV testing, where appropriate facilities and counseling are available (unless client “opts out”).

Syphilis
Syphilis is caused by an organism called Treponema pallidum. It is a curable infection, which if not treated promptly or adequately, will progress through four stages with increasingly serious symptoms. A person infected with syphilis is also at a higher risk for transmitting or acquiring HIV.

Symptoms
- Primary syphilis: The first symptom of syphilis infection is usually a small, painless sore in the area of sexual contact (penis, vagina, rectum or mouth), which appears about two to six weeks after exposure and disappears within a few weeks. Because the sores are painless, many people do not realize they are infected.
- Secondary syphilis: Shortly after the sore heals, symptoms of this phase appear. The infected person can develop a non-itchy rash on the entire body—especially the palms of the hand or soles of the feet, flat warts (condylomata lata), swollen lymph nodes, fever or tiredness. These symptoms may last from two to six weeks and will eventually clear, even without treatment. However, in the absence of treatment, the syphilis bacterium will remain present and eventually enter the latent phase.
- Latent syphilis: This is the period of time during which there are no visible signs or symptoms of the disease. This period can last from two to 30 years or more after the client is infected. Non-treponemal tests, such as rapid plasma reagin (RPR) and venereal disease research laboratory tests, will be positive.

Penicillin Allergy
Typical symptoms of true allergy to penicillin are the symptoms of anaphylaxis, including severe facial swelling, widespread itching and hives, difficulty breathing and swallowing, sudden drop in blood pressure, weak and rapid pulse, nausea, vomiting, abdominal cramps, diarrhea, confusion, dizziness and possible loss of consciousness. Symptoms occur within 20 minutes after penicillin injection. In general, treatment involves maintaining an airway and giving oxygen and epinephrine.
(VDRL) tests, are preferred tests for syphilis screening during this period. Treponemal tests (e.g., treponema pallidum hemagglutination assay-TPHA), if available, can be used to confirm non-treponemal test results.

- Tertiary syphilis: Symptoms of this late stage of syphilis can occur from two to 30 years or more after the initial infection. Complications during this stage can include: gummas (small bumps or tumors on the skin, bones, liver or other organs), blindness, insanity and paralysis. If treated during this period, gummas will usually disappear. Though treatment at this phase will treat the disease and stop future damage, it cannot repair or reverse the damage that occurred before treatment.

Complications

- Untreated or inadequately treated syphilis can produce symptoms from about two weeks up to 30 years or more as it progresses from early to late stages. While curable with antibiotics, complications that may develop in later stages cannot be reversed with treatment.

- Congenital syphilis: Syphilis can be passed from mother to infant before birth, and an infected newborn may suffer from blindness, other severe organ damage or death. Syphilis may cause abortion or premature delivery.

Syphilis Treatment for Early Disease: Primary, Secondary or Latent Syphilis of Two Years or Less (Choose ONE)

For anyone without penicillin allergy:

- Benzathine penicillin, 2.4 million units total by single intramuscular injection

Note: For patients with a positive syphilis test and no ulcer, administer the same dose at weekly intervals for a total of three doses.

Allergic to penicillin (men and non-pregnant women only):

- Doxycycline, 100 mg by mouth two times daily for 14 days
- Tetracycline 500 mg by mouth four times daily for 14 days

Allergic to penicillin (pregnant women only):

- Erythromycin 500 mg by mouth four times daily for 14 days. This treatment may not be effective. Urge these women to bring their babies within seven days after birth for treatment for congenital syphilis.

Urge client to ensure that their sex partner(s) also get treated.

Treatment of Late Latent Syphilis or Latent Syphilis of Unknown Duration

For anyone without penicillin allergy:

- Benzathine penicillin G, 7.2 million units total, administered as intramuscular injections in three doses of 2.4 million units each at one-week intervals
Allergic to penicillin (men and non-pregnant women only):

- Same as for early disease but treat for four weeks rather than 14 days

Allergic to penicillin (pregnant women only):

- Same as for early disease but treat for four weeks rather than 14 days

If more than one day of treatment is missed, the entire course should be restarted.

Chancroid
Also called “soft chancre,” chancroid is an STI caused by *Haemophilus ducreyi*. It is common in countries where HIV prevalence is high. Chancroid ulcers are often confused with those of syphilis or herpes, so treatment for both is often given. However, like herpes, chancroid ulcers are usually painful compared to syphilis ulcers, which are not.

**Symptoms**
In men and women, the symptoms are soft, painful blisters or sores (ulcers) on the mouth, lips, genitals, anus or surrounding areas.

**Complications**
- Treatment cures the infection and complications are rare.
- Untreated chancroid may lead to:
  - Swollen lymph glands in the groin (buboes) that can rupture and drain pus
  - Scarring and fibrosis
  - Recto-vaginal fistula

**Chancroid Treatment (Choose ONE)**

**Treatment of choice:**
- Azithromycin, 1 g by mouth as a single dose
- Erythromycin, 500 mg by mouth four times daily for seven days
- Ciprofloxin, 500 mg by mouth two times daily for three days

*(Do NOT give to pregnant or breastfeeding women or people under age 18.)*

**Alternative treatment:**
- Ceftriaxone, 250 mg intramuscular, injection as a single dose
- If patient is pregnant, breastfeeding or less than 16 years of age:
  - Erythromycin, 500 mg by mouth four times daily for seven days
  - Azithromycin, 1 g by mouth as a single dose
  - Ceftriaxone, 250 mg intramuscular, injection as a single dose
Re-examine in three to seven days. Sex partners—even those with no symptoms—should be treated if they had sex with the patient within 10 days before patient’s symptoms started or since symptoms started.

Genital Herpes
Genital herpes is transmitted through direct contact with the painful ulcers the infection causes, but herpes can also be passed to a sexual partner even after the sores have healed or before an outbreak has occurred. Herpes can also be transmitted between the genitals and the mouth during oral sex. Herpes sores heal on their own after one to two weeks, but the virus stays in the body after the sores are healed, causing outbreaks (outbreaks are when the sores return after healing; they can happen weeks, months or even years apart).

Symptoms
- In men and women: blisters or ulcers (sores) on the mouth, lips, genitals, anus or surrounding areas:
  - Burning or pain during urination
  - Itching or tingling in the genital area

Complications
- There is no cure for herpes, but there are ways to relieve pain caused by the sores.
- Some people experience repeated (often painful) outbreaks.
- Genital herpes can be transmitted to a baby during pregnancy and delivery. If infected, the baby can become very sick and possibly die.

Genital Herpes Treatment
- Duration of symptoms can be shortened if treatment begins early in an outbreak. If not started early, treatment may be ineffective.

Recommended Regimen for First Clinical Episode (Choose ONE)
Treatment of choice:
- Acyclovir, 200 mg orally, five times daily for seven days, OR
- Acyclovir, 400 mg orally, three times daily for seven days

Alternative treatment:
- Valaciclovir, 1g orally, twice daily for seven days, OR
- Famiciclovir, 250 mg three times daily for seven days
Recommended Regimen for Recurrent Infection (Choose ONE)

**Treatment of choice:**
- Acyclovir, 200 mg orally five times a day for five days, OR
- Acyclovir, 400 mg three times daily for five days

**Alternative treatment:**
- Valaciclovir, 500 mg twice a day for five days, OR
- Famciclovir, 125 mg three times daily for five days

**Note:** If patient is breastfeeding, pregnant or less than 16 years old, use acyclovir only when the benefit outweighs risk. Dosage is the same as for primary infection.

If the client has outbreaks more than six times a year, treat with acyclovir, 400 mg by mouth two times a day for one year and then reassess.

- Urge that sex partners be evaluated and counseled; treat partners if they are symptomatic:
  - Clients should not have sex when blisters are present—not even with a condom. Herpes can be spread even when no blisters are present, but a condom may provide some protection.
  - There is no cure available. The client should keep the infected area clean and try not to touch the sores. Antibiotic ointments may help.

**Viral Infections**

Viral STIs include HIV, herpes simplex virus and human papillomavirus. Herpes and HIV are covered elsewhere in this session.

**Human Papillomavirus**

Human papillomavirus (HPV) is the most prevalent STI in the world, occurring at some point in up to 75% of sexually active women. Human papillomaviruses are a group of more than 100 viruses. They are called papillomaviruses because certain types may cause warts, or papillomas, which are benign (non-cancerous) tumors. Some types of HPV are associated with certain types of cervical cancer.

Sexual contact with a person infected with some types of HPV may cause warts to appear on or around the genitals or anus. Genital warts (condylomata acuminatum) are most commonly associated with two HPV types, HPV-6 and HPV-11. Warts may appear within several weeks after sexual contact with an HPV-infected person, or they may take months or years to appear or they may never appear. HPVs may also cause flat, abnormal growths on the cervix and in the genital area.

**Symptoms**
- Both men and women: genital and/or anal warts (HPV-6, HPV-11)
- Many HPV infections do not cause any symptoms
Complications

- Some types of HPV cause abnormal changes in the cells of the cervix, which, if left untreated, can lead to cervical cancer. The types of HPV that cause genital warts are different from the types that cause cancer.

- In pregnant women, hormonal changes can cause warts to grow in size or number, bleed or make delivery difficult. The warts will shrink on their own after birth.

- A baby can become infected during pregnancy or delivery and develop warts on the genitals or anus, or in the throat.

HPV Treatment

Currently there is no treatment for HPV infection. Although genital warts can be removed, HPV can stay in the body after removal. Therefore, once infected, a person is most likely infected for life. Usually, an active infection is controlled by the immune system and with time becomes dormant; it is not possible to predict whether or when the virus will become active again. HPV can be transmitted to others if the virus is active. People may assume that if there are no warts, they are not at risk for transmitting HPV. Emphasize to clients that transmission can take place even when there are no visible signs of infection.

There are several types of HPV and both men and women can be infected. Some aggressive forms of HPV may lead to changes of the cervix that could develop into cervical cancer. This may take 15 to 20 years after initial exposure and less time in women who are HIV-positive.

For women already infected with HPV, the immediate need is to identify those with early, easily treatable precancerous lesions and to treat these women cost-effectively before the lesions progress to cancer. Visual inspection using a dilute solution of acetic acid (VIA) has been established as an acceptable alternative to Pap smears. It is now possible to offer VIA with cryotherapy, an outpatient treatment that uses a liquid coolant to destroy abnormal cervical tissue. Cryotherapy is highly effective and has been used extensively throughout the world for more than 20 years.

Treatment for Anogenital Warts (Choose ONE)

- Podophyllin 10–25% in compound tincture of benzoin, applied carefully to the warts, avoiding normal tissue. External genital and perianal warts should be washed thoroughly one to four hours after application of podophyllin. Podophyllin applied to warts on vaginal or anal epithelial surfaces should be allowed to dry before the speculum is removed. Treatment should be repeated at weekly intervals. Do NOT use podophyllin during pregnancy.

- Trichloracetic acid (TCA) (80–90%) applied carefully to the warts, avoiding normal tissue, followed by powdering of the treated area with talc or sodium bicarbonate to remove un-reacted acid. Repeat application at weekly intervals.

- Genital warts can also be treated by cryotherapy, electrosurgery or surgical removal. Selection of removal method will depend on the methods available and the anatomical location of the warts. Advise all patients that warts often reappear even after treatment.
Vaginal Infections
Vaginal infections (trichomoniasis, bacterial vaginosis and candidiasis) are very common in women of reproductive age and are nearly always symptomatic. Vaginal infections rarely cause complications.

There is no need to screen for asymptomatic cases in non-pregnant women. However, bacterial vaginosis and trichomoniasis can cause preterm delivery and premature rupture of membranes. If possible, providers should screen women with a history of spontaneous abortion or preterm delivery, regardless of symptoms.

Trichomoniasis
*Trichomonas vaginalis* is a microscopic organism that causes trichomoniasis. It is spread through sexual contact.

Symptoms
- Both men and women may be infected with trichomonas, yet have no symptoms. Some people may carry the organism for months or years with no symptoms at all, or they may have had symptoms that have disappeared.
- Women who have symptoms may notice an unusual and increased vaginal discharge with an unpleasant odor, and itching, burning and/or soreness of the vulva. The discharge may be greenish in color and bubbly.
- On speculum exam, women may have a frothy, bubbly cervical discharge and red spots on the cervix.
- Men who have symptoms may observe a discharge from the penis and burning with urination.

Complications
There is currently no evidence that trichomoniasis leads to serious complications. However, recent evidence indicates that it may be associated with early delivery in pregnant women. In addition, trichomoniasis can cause irritation of the skin in and around the vagina, and the presence of damaged skin can increase the risk of HIV transmission.

*Trichomoniasis Treatment (Choose ONE)*

Treatment of choice:
- Metronidazole, 2 g by mouth as a single dose
- Metronidazole, 400 mg or 500 mg by mouth two times daily for seven days

*(Do NOT give metronidazole to pregnant women before the fourth month of pregnancy.)*

Alternative treatment:
- Tinidazole, 2 g by mouth in a single dose
- Tinidazole, 500 mg orally twice a day for seven days
If woman is pregnant (after the first trimester for metronidazole) or breastfeeding:

- Clindamycin, 300 mg orally twice a day for seven days, OR
- Metronidazole 200 mg or 250 mg by mouth three times a day for seven days, OR
- Metronidazole gel 0.75%, one full applicator (5 g) intravaginally twice a day for five days

Advise patient not to drink alcohol while taking metronidazole or tinidazole. It may cause nausea and vomiting. Urge that sex partner(s) be treated. Tell patient to avoid sex until treatment is completed and symptoms are gone in both partners.

**RTIs That Are Not Considered STIs**

**Bacterial Vaginosis**

Bacterial vaginosis is often referred to by a number of different names, such as gardnerella and haemophilus, two of the more common microorganisms found when it is present. It is an overgrowth of a variety of normally occurring bacteria in the vagina, but the actual cause is unclear; it is not considered to be sexually transmitted. Studies indicate that a woman with bacterial vaginosis has an increased chance of having a variety of other reproductive tract problems, so diagnosis and treatment are important.

**Symptoms**

- Bacterial vaginosis usually causes a vaginal discharge that is grey in color and has an unpleasant or fish-like odor. The discharge may or may not be accompanied by itching or irritation. Some women have no symptoms.

- Men usually do not have symptoms of this infection. It is unclear if they carry the bacteria.

**Complications**

Bacterial vaginosis may increase a woman’s chance of having other reproductive tract problems, such as other types of infections. It has also been associated with early delivery in pregnant women and low birth weight in newborns.

**Treatment**

**Treatment of choice:**

- Metronidazole, 2 g by mouth as a single dose
- Metronidazole, 400 mg or 500 mg by mouth two times daily for seven days

*(Do NOT give metronidazole to pregnant women before the fourth month of pregnancy.)*
Alternative Treatment:
- Clindamycin cream 2%, one full applicator (5 g) intravaginally at bedtime for seven days
- Clindamycin, 300 mg orally twice a day for seven days

If woman is pregnant (after the first trimester for metronidazole) or breastfeeding:
- Clindamycin, 300 mg orally twice a day for seven days, OR
- Metronidazole, 200 mg or 250 mg by mouth three times a day for seven days, OR
- Metronidazole gel 0.75%, one full applicator (5 g) intravaginally twice a day for five days

Candidiasis (Moniliasis)
Other names used for candidiasis include yeast and yeast infection. Candidiasis is caused by an overgrowth of organisms that are often present in low numbers in the vagina. Pregnancy and taking antibiotics are among the causes of an overgrowth of these organisms, leading to irritation or itching in and around the outside of the vagina. Frequent exposure to semen over a short period of time also can cause a yeast infection. Sometimes, but rarely, candidiasis can be passed sexually from person to person.

Symptoms
- In women, symptoms of moniliasis include vaginal itching, irritation, burning and sometimes a white, thick discharge.
- In men, moniliasis can appear as an itchy rash on the genitals.

Complications
Moniliasis does not infect the uterus or fallopian tubes and does not affect a woman’s ability to become pregnant. It may cause severe irritation, and because it damages the skin, it can be bothersome and may require treatment.

Candidiasis Treatment (Choose ONE):
For women:
- Nystatint, 100,000-unit tablet inserted in vagina once daily for 14 days
- Miconazole, 200 mg suppository inserted in vagina once daily for three days or 100 mg suppository inserted in vagina once daily for seven days
- Clotrimazole, 500 mg tablet inserted in vagina as a single dose, or 100 mg tablet once daily for seven days or two 100 mg tablets once daily for three days

For men:
- Nystatin, miconazole or clotrimazole cream or ointment applied to infected area two times a day for seven days
Other Sexually Transmitted Infections

There are many other infections that are sexually transmitted. Sores, growths, ulcers or swollen lymph nodes in the genital area, and pain, burning or vaginal irritation are common signs and symptoms of STIs and other RTIs and should be evaluated by a clinician. When clients complain of these symptoms, they may or may not have an STI, but they should see a clinician for evaluation as soon as possible.

Can Sexually Transmitted Infections Be Treated?

- Most STIs can be treated and many can be cured. Treatment varies depending on the particular disease. Regardless of the type of medication given for treatment, the prescribed treatment must be completed, even if the symptoms disappear. If not, remaining microorganisms may multiply and spread, causing the symptoms to re-occur.

- If a client is diagnosed with an STI, his or her partner(s) is probably also infected, whether or not the partner has symptoms. All partners should be treated for the STI. If not, the untreated partner can pass the disease back to the treated one or to other partners. Both partners should complete the prescribed treatment before they have sex to be sure that they do not transmit the infection again.

- The best way to lower the risk of getting an STI is to use condoms correctly with every sexual contact. The only way to prevent getting an STI is to avoid all sex and sexual contact. Having sex with one partner who is not infected and who has no other partners can also protect against STIs. However, if one’s partner is sexually active with more than one person and becomes infected, that person can transmit the infection.
### Table 3.2-3: Symptoms and Likely Diagnosis of Common Reproductive Tract Infections
Infections That Cause Painful Urination or Unusual Genital Discharge

<table>
<thead>
<tr>
<th>Likely Diagnosis</th>
<th>Typical Symptoms</th>
<th>Men</th>
</tr>
</thead>
</table>
| **Gonorrhea and/or chlamydia**  
Difficult to diagnose | - Unusual vaginal discharge  
- Unusual vaginal bleeding  
- Lower abdominal pain  
A woman can have gonorrhea or chlamydia infection for several months without symptoms.  
If an infected woman gives birth, her baby could become infected and go blind unless treated. The baby could also get pneumonia or otitis. | - Painful urination  
- Drops of pus from the penis  
In men, symptoms usually appear soon after infection. Without treatment, gonorrhea and chlamydia infection can cause infertility. |
| **Trichomoniasis** | - Vaginal burning and itching  
- Foamy, green-yellow fluid with a bad smell from the vagina  
- Pain or burning when urinating | - Watery, white fluid from the penis  
- Pain or burning when urinating |
| **Bacterial vaginosis**  
A common infection caused by the overgrowth of the normal bacteria in the vagina. | - Gray, sticky fluid from the vagina (with a fishy smell, especially after sex) | These infections are not considered STIs and partners do not need to be treated. |
| **Candidiasis**  
A very common genital infection usually caused by overgrowth of a fungus that normally is found in the vagina. Candida may be caused by use of antibiotics, diabetes, oral contraceptive use, douching or even pregnancy. | - Intense, vaginal burning and itching  
- Clumpy white fluid in and around the vagina |
<table>
<thead>
<tr>
<th>Likely Diagnosis</th>
<th>Typical Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Syphilis</strong></td>
<td></td>
</tr>
</tbody>
</table>
| An inexpensive screening test for syphilis is widely available. | - Painless sore on the vagina or anus  
- Sore may last only a few days, usually goes away without treatment.  
- Women may not notice it.  
- But the disease keeps spreading throughout the body.  
- Weeks or months later, the person may have:  
  - Sore throat,  
  - Skin rashes, and/or  
  - Mild fever.  
- All these symptoms may disappear.  
- Without treatment, however, syphilis will cause neurological, cardiovascular and other complications from tertiary syphilis (heart disease, paralysis, insanity) and even death.  
- A pregnant woman can pass syphilis to her fetus before birth. The baby could have congenital infection abnormalities.  
- Itchiness of the genitals  
- White fluid under the foreskin (if uncircumcised)  
- Painless sore on the penis or anus  
- Sore may last only a few days, usually goes away without treatment.  
- But the disease keeps spreading throughout the body.  
- Weeks or months later, the person may have:  
  - Sore throat,  
  - Skin rashes, and/or  
  - Mild fever.  
- All of these symptoms may disappear.  
- Without treatment, however, syphilis causes heart disease, paralysis, insanity and even death. |  
| **Genital herpes** |                  |
| One or more very painful blisters around the vagina or around the anus.  
- Blisters burst open and dry up to become scabs.  
- Sores can last for 3 weeks or more with first infection, then disappear.  
- New blisters usually appear from time to time because the virus stays in the body.  
- Blisters last a shorter time than on first infection.  
- Newborn: neonatal herpes, encephalitis and disseminated infection. | One or more very painful blisters around the penis or around the anus.  
- Blisters burst open and dry up to become scabs.  
- Sores can last for 3 weeks or more with first infection, then disappear.  
- New blisters usually appear from time to time because the virus stays in the body.  
- Blisters last a shorter time than on first infection. |
### Approaches to STI Diagnosis

There are several possible approaches to diagnosis of STIs. Follow local protocols or guidelines and use what is available and appropriate in your setting.

#### Etiologic Diagnosis

This is the most traditional and accurate approach, and it is based on the results of microscope or laboratory tests such as cultures. Though this approach is the most reliable, there are several disadvantages, including that it:

- Is expensive/time consuming
- Requires one to six days for incubation and culture/sensitivity, resulting in delay of treatment
- Requires the client to return for a second visit to collect lab results and receive treatment
- Requires needles, syringes, centrifuge, lab facilities and a person skilled in lab testing

#### Clinical Diagnosis

This is the least reliable of the three approaches. With this approach, providers rely on their own clinical experience to make a diagnosis (based on history and physical exam). This approach can be problematic because of the following:

- Previous treatment by another clinician (or traditional provider) may alter the signs and symptoms.
- Even experienced STI service providers can misdiagnose STIs when relying only on their clinical experience, especially since mixed infections can also occur.
- STIs can often vary in the way they appear upon examination (i.e., they may not appear as a “textbook” case).
- It requires a provider skilled in speculum and pelvic exams, differential diagnosis and possibly basic lab skills (such as microscopy where available) and also requires supplies and equipment for conducting the exam.

#### Syndromic Diagnosis

In low-resource settings, syndromic management may be the best approach. In the syndromic approach, diagnosis is based on the identification of syndromes, which are combinations of symptoms the client reports and signs that the provider observes. The diagrams and management use

<table>
<thead>
<tr>
<th>Likely Diagnosis</th>
<th>Typical Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Women</strong></td>
</tr>
</tbody>
</table>
| Chancroid        | - Soft, painful sore on vagina or anus.  
|                  | - Swollen lymph glands in the groin that contain pus; these may open and drain pus and cause scars.  
|                  |                  | - Soft, painful sore on penis or anus.  
|                  |                  | - Swollen lymph glands in the groin that contain pus; these may open and drain pus and cause scars.  

---

---
groups of symptoms rather than symptoms for specific STIs. A main disadvantage is that the syndromic approach does not generally work well for cervical infections.


**Counseling the Client about Sexuality and STI/HIV Risk: Getting Started**


When counseling clients on sexual and reproductive health issues, we often need to ask very personal, sensitive questions. This can be challenging for the client, who may not be used to discussing such personal issues with someone other than a family member (or with anyone at all). It can also be challenging for providers or counselors since they must be able to obtain the information to address a client’s risk of unintended pregnancy and infection with HIV and other STIs, as well as the client’s concerns about sexuality.

**Getting Started**

It is best to get the conversation started with general, open-ended questions. Asking open-ended questions, such as about a client’s reasons for coming to the service site or about her general health, will help pave the way for the more sensitive questions you will ask. Later, you can probe with more explicit questions to obtain specific information. You may introduce the discussion in your own way, depending on the setting, the client and the type of service she seeks or needs.

**Examples**

- Assure the client that the questions are routine and that everyone is asked the same questions. For example:
  - “I am going to ask some very personal questions now. We ask these questions of everyone because we believe that a person’s sexual life is an important part of health.”

- Assure the client that the questions will have a direct bearing on her health care and the decisions made during the visit:
  - “It is important for me to ask you these types of questions so that I can help you to make health decisions that are right for you.”

- Be sure that she feels comfortable:
  - “If there are any questions you do not feel comfortable answering, feel free to let me know.”

- Introduce the questions within the context of STI/HIV risk:
  - “As you may know, HIV and other sexually transmitted infections occur a lot in this area. I would like to talk with you more about your situation so that we can determine if you might be at risk. We discuss this with all of our clients to make sure everyone gets the information and family planning method that best meets their needs. I will need to ask you some very personal questions, but I’m asking these questions so I will know how best to help you.”
General Questions
■ Here are some very general questions to get the conversation started. You may use one or more of these as appropriate:
  ■ Can you tell me about your husband, sexual partner or partners?
  ■ Are you happy with your sex life? Why or why not? Do you talk with your partner about it?
  ■ Tell me about your first sexual experience (this is especially important for adolescents).

Getting Specific
More pointed questions can often be integrated into a discussion of medical history, demographics or risk factors pertinent to the service being provided. If the information does not emerge through general discussion, ask probing questions on HIV and STI risk, family planning or other relevant issues.

Probing: Asking Specific Questions
This list of issues is not to be used as a checklist; it is merely a guide to help you remember the key issues when obtaining a sexual history. Questions about a client’s sexual life, sexual practices, sexual risks and social context should be worked into a two-way conversation about her individual situation.

HIV/STI Risk
■ During the discussion, try to obtain information about key issues so you can assist the client to perceive and determine her risk for STIs, including:
  ■ Number (and gender) of current and past sexual partners
  ■ Knowledge of her partner’s sexual practices
  ■ Condom use
  ■ History of STIs, RTIs and other related infections
  ■ Sexual practices and behaviors

Family Planning Concerns
■ In addition to obtaining information about contraceptive history and needs, reproductive intentions and potential contraindications, explore factors associated with sexuality that may affect contraceptive choice and continuation, including:
  ■ Fear of becoming pregnancy or fear of disease
  ■ Concerns about the negative impact of the method on sexual pleasure
  ■ Diminished sexual response due to the use of hormonal methods
  ■ HIV and STI risk (see above)
Other Possible Issues

- Past surgery or diseases related to sexual functioning
- Sexual concerns with the onset of menopause
- Sexual dysfunction in the client or her partner
- Pain during sex
- Lack of desire, orgasm or sexual satisfaction
- Insufficient lubrication
- Age at first intercourse
- Experience of recent or past sexual coercion or violence
- Impact of drug or alcohol use on sexual activity and risks
- Partner’s use of, support for and communication about contraceptive use or disease prevention

Counseling the Client about Sexuality and STI/HIV Risk: Sample Questions


The following are some of the questions you may use in discussion or counseling about STIs/HIV. Choose or adapt questions as needed. Avoid those questions that are not culturally or socially appropriate in your setting. Some questions may not be appropriate or needed in an emergency PAC or individual client situation.

- When did you first become sexually active?
- Can you tell me how many sexual partners you have had?
- Were these partners male or female?
- Did you consent or agree to all of your past sexual experiences?
- Have you ever used any kind of contraception (family planning method) in your sexual relationships? (post-procedure question)
- If so, which methods? How frequently have you used these methods?
- Specifically, have you ever used (male) condoms? (post-procedure question)
- If not, would you be interested in using condoms in your current or future relationships? (post-procedure question)
- To your knowledge, have you or any of your past or current partners ever had an STI?
- Do you have any other partners besides your primary partner? Do you think that your partner may have other partners? Have you had more than one sexual partner in the past year? Has your partner had more than one sexual partner in the past year?
- Do you feel any itching, burning or other discomfort at any other times? Do you or have you ever had an unusual discharge from your vagina/penis?
- Do you have any questions or concerns about your sexual relationship that you would like to discuss?

- How likely do you think it is that you may be at risk for HIV or other STIs? How likely do you think it is that your partner could be at risk for HIV or other STIs?

- What do you do to protect yourself from STIs?

- How would you feel about a (or another) pregnancy at this time? How do you think your partner would feel?

**Steps in the Management of Sexually Transmitted Infections**

See “Counseling the Client about Sexuality and STI/HIV Risk: Sample Questions” above for specific questions to ask.

**History Taking**

*Careful Abdominal and Pelvic Examinations*

*When doing the abdominal and pelvic exams for the PAC visit (initial PAC assessment or follow-up visit), pay close attention to the following:*

- Presence of:
  - Lower abdominal pain or tenderness;
  - Genital ulcers, sores or swellings (buboes) in the groin;
  - Presence of a purulent (containing muco-purulent) discharge, friable (easily bleeds) cervix or unrecognized vaginal discharge;
  - Pain or tenderness on cervical motion; and
  - Suprapubic, adnexa or pelvic mass.

**Use of Appropriate STI Treatment Flow Charts**

**Vaginal Discharge**

Figure 3.2.1: Syndromic STI Management: Flow Chart 1: Vaginal Discharge

**Vaginal Discharge: Bimanual and Speculum**

Figure 3.2.2: Syndromic STS Management: Flow Chart 2: Vaginal Discharge: Bimanual and Speculum With or Without Microscope

**Genital Ulcers**

Figure 3.2.3: Syndromic STI Management: Flow Chart 3: Genital Ulcers

**Lower Abdominal Pain**

Figure 3.2.4: Syndromic STI Management: Flow Chart 4: Lower Abdominal Pain

**Use of the 4 C’s:**

1. Compliance
2. Condoms
3. Counseling/Education

4. Contact Tracing

1. Compliance

Once clients understand the information regarding their care, they play an important part in making decisions about that care and in completing the agreed-upon treatment, including follow-up care.

**Table 3.2-4: Provider and Client Roles in Compliance**

<table>
<thead>
<tr>
<th>Provider</th>
<th>Client</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give clear, simple instructions regarding any drugs or treatment in a language the client understands.</td>
<td>Take all drugs for the full time prescribed and in the right dosage.</td>
</tr>
<tr>
<td>Emphasize importance of keeping to the course of treatment.</td>
<td>Complete the course of treatment prescribed.</td>
</tr>
<tr>
<td>Explain side effects and any danger signs associated with the treatment and the appropriate response.</td>
<td>Be aware of danger signs and seek care accordingly.</td>
</tr>
<tr>
<td>Encourage the client to ask questions. Be sure the client demonstrates understanding of information given. Ask the client to repeat information.</td>
<td>Ask questions to be sure you understand the treatment.</td>
</tr>
<tr>
<td>Schedule follow-up appointment.</td>
<td>Keep follow-up appointments.</td>
</tr>
</tbody>
</table>

2. Condoms

As well as prevent pregnancy, condoms can prevent the spread of STIs and HIV if used properly. It is important to feel comfortable talking about condoms and showing how they are used. Get the help of a male co-worker, if needed, to discuss and demonstrate the correct use of condoms to clients. During the demonstration, show the client how to:

- Ensure that the condom is not expired
- Ensure that the package/condom is not punctured
- Properly open the package
- Pinch the tip to remove residual air and create a reservoir for semen
- Properly roll the condom on the erect penis
- Safely remove the condom without self-contamination
- Safely dispose of the used condom

3. Counseling/Education

Counseling includes giving health education messages. Listening to what clients say and how they say it can help you to give them the information they need. Although each encounter with a client is short, it is important to inform every client of the risks of HIV/AIDS. See the sections “STIs and Adolescents,” “HIV Counseling and Referral” and “Basic Facts about HIV Infection and AIDS” to guide your counseling of clients about STIs and HIV.
STIs and Adolescents

Generally, youth have higher rate of STIs than older adults do. The many reasons for this include:

- Young people tend to have more partners and shorter relationships so there is more opportunity for STIs to spread.
- They may find it difficult or embarrassing to use condoms.
- They may find it difficult to refuse sex in some situations (within the family or in exchange for goods such as school supplies, food or clothes).
- They may not recognize situations and sexual partners where risk of infection is high.
- They may lack knowledge about the symptoms of STIs and when to seek care.
- They may feel uncomfortable about using family planning or other reproductive health services for fear of critical and judgmental responses from staff.
- They may not be aware of places to go for private and confidential services.
- They may be unable to afford health services.

Safer behaviors that should be encouraged for young people include:

- Delaying onset of sexual activity
- Learning how to use condoms consistently and correctly
- Practicing dual protection to prevent unplanned pregnancy as well as STIs
- Limiting number of partners
- Avoiding high-risk sexual practices (especially unprotected vaginal or anal sex) with any partner
- Recognizing symptoms of STI and seeking early treatment


4. Contact Tracing

Contact tracing first requires a good rapport between the provider and the client. Clients need to understand the importance of advising their partners about the risk and encouraging them to seek treatment. Known contacts should be treated for the STI even if they have no symptoms. Help clients think about how they will discuss the issue with their partners. This can be a very difficult task for some women and they may fear stigma or physical abuse. Providers can increase the number of contacts who come for treatment by giving clients appointments for their contacts and offering to discuss the risk with them and their contacts.

Give Return Visit and Follow-Up Care

Follow return visit guidelines in appropriate flow chart.

Preventing and Curing Sexually Transmitted Diseases: Information for Clients

First, prevent STIs:

- Some STIs cannot be cured, including HIV/AIDS.
- Remember—ABC prevents STIs:
Abstain from sex.

Be faithful. Stay with just one sex partner.

Consistently use condoms.

Protect yourself against AIDS. Other STIs increase your risk of getting HIV/AIDS.

If you have an STI:

Seek care quickly if you think you might have an STI—even if you do not have symptoms.

Do not spread STIs: If you think you might have an STI, avoid sex or at least use condoms with every sex partner. If you are diagnosed with an STI and given medicine, avoid sex until three days after you have taken all of your medicine, and you have no more symptoms.

Cure your infection: Take all your medicine as directed even if symptoms go away or you feel better.

Help your sex partners get treatment: Tell them to come for treatment or else bring them in.

Come back to make sure you are cured: If you still have symptoms, you can get more medicine to cure your infection.

Protect your baby: Go (or help your wife go) to an antenatal clinic within the first three months of pregnancy for a physical exam and syphilis test and even voluntary HIV screening test.

Syndromic Approach in STI Management

Rationale

Providers lack time and resources to diagnose and treat in the conventional way.

Providers lack equipment or skills to diagnose STIs using laboratory tests:

Lab tests or reagents may be unavailable.

Clients need relief of symptoms immediately or may not return for test results or treatment.

Diagnoses based on clinical judgment can be inaccurate or incorrect.

Success Depends On

A reliable drug supply

Referral clinics

A structure to support STI services in primary health centers

Epidemiologic surveillance to identify the most cost-effective antibiotics

Condoms readily and cheaply available and promoted to the public

Mass media communication to alert people to STIs, encourage them to seek treatment, promote condoms and support mutual monogamy

Contact tracing and treatment
National standardized treatment protocols for STIs based on international guidelines including syndromic approach (that help to ensure adequate treatment at all levels, facilitate training and supervision)

Advantages of Syndromic STI Management
- Improves clinical diagnosis by avoiding wrong diagnosis and ineffective treatment
- Can be learned by a variety of providers including primary health workers, clinical officers, medical assistants, nurses or midwives
- Allows treatment of symptomatic clients in one visit
- Effective for urethral discharge in men and genital ulcers

Disadvantages of Syndromic STI Management
- Not adequately treating those with no symptoms
- Women take up to two weeks to show symptoms
- Wasting of drugs, which are often scarce in developing countries
- Works well for vaginal infections, but not designed to detect the more serious and often asymptomatic cervical infections
- Potential for over-treatment:
  - Clients are treated for multiple infections, although some will have no infection or only one. This is costly in terms of unnecessary drug use and the potential for microorganisms to develop resistance to antimicrobial drugs.
Figure 3.2.1: Syndromic STI Management: Flow Chart 1: Vaginal Discharge

Patient complains of vaginal discharge, vulval itching or burning

Take history and examine
Assess risk

Abnormal discharge or vulval erythema? No

Any other genital disease? No

Lower abdominal tenderness?

Yes

Use appropriate flow chart for additional treatment

Use flow chart for lower abdominal pain (4)

High GC/CT setting* or risk assessment positive?

Yes

Treat for:
- Gonococcal infection.
- Chlamydia trachomatis
- Bacterial vaginosis and
- Trichomonas vaginalis
- Treat partner as appropriate

No

Treat for Bacterial vaginosis and Trichomonas vaginalis

Vulval edema/curd-like discharge, erythema, excoriations present?

Yes

Treat for Candida albicans

No

* The determination of high-prevalence levels needs to be made locally.

Educate and counsel
Promote condom use and provide condoms
Offer HIV counseling and testing if both facilities are available unless client "opts out"

Figure 3.2.2: Syndromic STS Management: Flow Chart 2: Vaginal Discharge: Bimanual and Speculum With or Without Microscope

1. Patient complains of vaginal discharge, vulval itching or burning
2. Take history and examine (External, speculum and bimanual)
   - Assess risk
   - Perform wet mount microscopy of vaginal speculum for TV and yeast cells (optional)
3. Lower abdominal tenderness or cervical motion tenderness present?
   - Yes → Use appropriate flow chart for additional treatment
   - No
4. Cervical mucus/erosions or High GC/CT setting* or Risk assessment positive
   - Yes → Treat for:
     - Gonococcal infection,
     - Chlamydia trachomatis
     - Bacterial vaginosis and
     - Trichomonas vaginalis
     - Treat partner as appropriate
   - No
5. Treat for Bacterial vaginosis and Trichomonas vaginalis
6. Vulval edema/curd-like discharge, erythema, excoriations present?
   - Yes → Treat for Candida albicans
   - No

* The determination of high-prevalence levels needs to be made locally.

Figure 3.2.3: Syndromic STI Management: Flow Chart 3: Genital Ulcers

Patient complains of a genital sore or ulcer

Take history and examine

Only vesicles present?  No  Sore or ulcer present?  No

Yes  Yes

Treat for HSV2  Treat for syphilis and chancroid
Treat for syphilis if indicated  Treat for HSV2

- Educate and counsel
- Promote condom use and provide condoms
- Offer HIV counseling and testing if both are available
- Ask patient to return in 7 days
- Treat partner

Ulcers healed?  No  Ulcers improving?  No  REFER

Yes  Yes

Continue treatment for a further 7 days

Figure 3.2.4: Syndromic STI Management: Flow Chart 4: Lower Abdominal Pain

Patient complains of lower abdominal pain

Take history (including gynecological history) and examine (include abdominal and vaginal)

Any of the following present?
- Missed/overdue period
- Recent delivery, abortion or miscarriage
- Abdominal guarding and/or rebound tenderness
- Abnormal vaginal bleeding
- Abdominal mass

Is there cervical motion tenderness, or lower abdominal tenderness and vaginal discharge?

- Yes
  - Manage for PID and review in 3 days
  - If patient has improved, continue all treatment until completed
  - Educate and counsel
  - Promote condom use and provide condoms
  - Offer HIV counseling and testing if both are available unless client "opts out"
  - Ask patient to return if necessary

- No
  - Any other illness found?
    - Yes
      - Manage appropriately
    - No
      - Refer

HIV Counseling and Referral

HIV prevention counseling should focus on the client’s own unique circumstances and risk and should help the client set and reach an explicit behavior-change goal to reduce the chance of acquiring or transmitting HIV. HIV counseling is usually, but not always, conducted in the context of HIV testing.\(^5\) The main role of the PAC provider is to provide HIV/AIDS information and prevention counseling to all PAC clients (as appropriate) and refer to other services for testing and treatment\(^6\) unless the client “opts out.” The provider should be familiar with facilities that offer these other services and related information such as cost. During HIV counseling for PAC clients, providers should:

- Explain HIV and AIDS and the ways HIV is spread
- Discuss ways to prevent the spread of HIV
- Offer specific information on how to access testing and/or treatment

Detailed information on testing methods will be a part of the pre-test counseling at the test site. Post-test counseling provides the client with notification of the HIV test results, deals with the client’s reaction to the test results and individualized information related to those results. It is critical to counsel clients about HIV in a nonjudgmental way. Imposing guilt or voicing disapproval rarely helps people deal responsibly with HIV or any STI. Help clients learn how to prevent transmission to others and to protect themselves from other future infections. See sections on “Counseling the Client about Sexuality and STI/HIV Risk: Getting Started,” “Sample Questions,” and “STIs and Adolescents.” The following section outlines basic information about HIV/AIDS that will be useful in providing counseling and health messages to PAC clients.

Basic Facts about HIV Infection and AIDS\(^8\)

What Is HIV?
The human immunodeficiency virus (HIV) is the virus that causes AIDS.

- **H:** Human
- **I:** Immunodeficiency
- **V:** Virus

- The HIV virus is found in the body fluids (particularly blood, semen and vaginal secretions) of infected persons.
- HIV breaks down the body’s defenses against infection and disease—the body’s immune system—by destroying specific white blood cells (CD4 cells) and weakening the immune system.
- When the immune system becomes weak or compromised, the body loses its protection against illness.

HIV infection is for life. Although there are life-prolonging drugs, there is no cure. As time passes, the immune system is unable to fight the HIV infection and the person may develop serious and deadly diseases, including other infections and some types of cancer.
Types of HIV
HIV-1 and HIV-2 are types of HIV. Both types are transmitted the same way, and both are associated with similar opportunistic infections and AIDS. HIV-1 is more common worldwide. HIV-2 is found predominantly in West Africa, Angola and Mozambique.

Differences between HIV-1 and HIV-2
HIV-2 is less easily transmitted than is HIV-1, and it is less pathogenic, meaning that the period between initial infection and illness is longer. In some areas, a person may be infected with both HIV-1 and HIV-2. While HIV-2 can be transmitted from an infected mother to her child, this appears to be rare (0% to 5% transmission rate in breastfed infants in the absence of any interventions).

What Is AIDS?
AIDS is an acronym for acquired immunodeficiency syndrome and refers to the most advanced stage of HIV infection.

A: Acquired—(not inherited) to differentiate from a genetic or inherited condition that causes immune dysfunction
I: Immuno—the immune system
D: Deficiency—inaability to protect against illness
S: Syndrome—a group of symptoms or illnesses that result from the HIV infection

Almost all people who are HIV-positive will ultimately develop HIV-related disease and AIDS, the end stage of HIV infection. As HIV infection progresses, the infected person becomes susceptible to opportunistic infections.

An opportunistic infection (OI) is an illness caused by a germ that might not cause illness in a healthy person, but will cause illness in a person who has a weakened immune system. For example, co-infection with tuberculosis (TB) is very common in people infected with HIV.

People living with advanced HIV infection suffer from opportunistic infections of the lung, brain, eyes and other organs. Other common opportunistic infections in persons diagnosed with AIDS are pneumocystis carinii pneumonia (PCP); cryptosporidiosis; histoplasmosis; other parasitic, viral and fungal infections; and some types of cancers, such as Kaposi’s sarcoma.

Differences among HIV, HIV Infection and AIDS
■ HIV is the virus that causes infection.
■ The person who is HIV-infected may have no signs of illness but can still infect others.
■ Most people who are HIV-infected will develop AIDS after a period of time, which may be several months to more than 15 years.
■ AIDS is a group of serious illnesses and opportunistic infections that develop after a person has been infected with HIV for a long period of time.
A diagnosis of AIDS is based on specific clinical criteria and laboratory test results. The CD4 count and viral load are two measures of the progression of HIV:

- **CD4 count**: This is the number of CD4 T-lymphocyte cells in the blood. CD4 cells are the type of white blood cell that is the immune system's key infection fighter. The CD4 count reflects the “health” of the immune system.

- **Viral load**: This refers to the amount of HIV in the blood. The viral load can be measured by PCR (polymerase chain reaction) testing. The test can be used to check the person’s response to antiretroviral (ARV) therapy.

When HIV actively multiplies, it infects and kills CD4 cells. The CD4 count is usually expressed as the number of cells per cubic millimeter. The normal CD4 count in a healthy adult is between 500 and 1,400 cells/mm³. As the CD4 count of an adult falls below 200 cells/mm³, the risk of opportunistic and serious HIV-related infections becomes higher. The viral load is very high shortly after the person first becomes infected with HIV. A high viral load leads to a higher transmission risk. Viral load falls steeply when the body develops antibodies to HIV and rises again after a number of years as the immune system weakens and CD4 count drops. A high viral load can also be a sign of more severe disease progression.

People infected with HIV usually develop antibodies four to six weeks after becoming infected, but it may take as long as three months for antibodies to develop. The period of time between infection with HIV and testing positive for HIV is called the “window period.” Some people experience a flu-like illness (fever, rash, joint pains and enlarged lymph nodes) at the time of seroconversion. This is referred to as Acute Retroviral Syndrome (ARS).

- The terms **HIV-positive** or **HIV-negative** are used to describe the HIV status of someone who has been tested:
  - A person whose blood test result is HIV-positive has been infected by HIV; this person is said to be seropositive, HIV-positive or HIV-infected.
  - A person whose blood test result is HIV-negative is said to be seronegative, HIV-negative or not infected with HIV. If a person with an HIV-negative test result has engaged in behavior that places him or her at risk for HIV in the past three months, then the HIV-negative test result may not be an accurate indication of the person’s HIV status because the person might be in the window period and should be re-tested.

**Asymptomatic HIV Infection**
A person who is HIV-infected but looks and feels healthy is asymptomatic. None of the physical signs or symptoms that indicate HIV infection is present. Whether they have symptoms or not, people who are HIV-infected can still pass the virus to others. The duration of the asymptomatic phase varies greatly from person to person. Some adults may develop symptoms of HIV as quickly as a few months after primary infection; others may take up to 15 years to develop symptoms.

**Symptomatic HIV Infection**
A person who has developed physical signs of HIV and reports symptoms related to HIV is symptomatic. The immune system weakens and CD4 count decreases during this phase.
progression of HIV depends on the type of virus and specific host characteristics including general health, nutritional and immune status.

AIDS
Almost all people who are HIV-infected will ultimately develop advanced HIV infection and AIDS, the end stage of HIV infection. As HIV infection progresses, the CD4 count continues to decrease and the infected person becomes more likely to develop OIs and other HIV-related infections. Even if the symptoms of AIDS develop and then subside for a while, the virus that causes them is still present, and the infected person can still transmit the disease.

How Is HIV Contracted?
HIV is contracted:
- Through sexual contact (vaginal, anal or oral intercourse) with an infected person, during which semen or vaginal fluids and sometimes blood come into contact with the penis, the lining of the vagina, the rectum or the mouth. HIV in these fluids can then get into the blood stream. HIV can enter the blood through open genital or oral sores, or cuts.
- Through transfusions or treatments with infected blood products.
- Through skin-piercing instruments that have been in contact with infected blood or body fluids and have not been properly disinfected (for example, needles, syringes, razor blades and instruments used to provoke an abortion, or circumcision instruments used previously on another client who was HIV-positive).
- In infants, from an infected mother during pregnancy or childbirth. If the mother is infected with HIV, there appears to be a 15–30% chance that the newborn child will be infected. According to recent evidence, a breastfeeding child may have a higher risk of HIV infection through breast milk if the child’s mother becomes infected with HIV while she is breastfeeding. However, the child’s risk of HIV infection must be weighed against the risk of the child dying from other causes if it is not breastfed. Diarrheal disease, which can be fatal, is often attributed to the use of contaminated water and food in place of breastfeeding. If a woman is HIV-positive, or suspects that she is, and wishes to breastfeed, encourage her to consult a skilled provider for up-to-date information and counseling.
How Is HIV NOT Contracted?
- HIV is not contracted through any of the following:
  - Ordinary social contact
  - Sharing clothes
  - Touching or sharing food or dishes
  - Kissing, hugging or shaking hands
  - Toilet seats
  - Insect bites
  - Tears
  - Saliva
  - Sweat
  - Living with an infected person

What Are the Symptoms of HIV Infection and AIDS?
- Persons infected with HIV may be asymptomatic. It can take eight years or more between HIV infection and the diagnosis of AIDS. Once symptoms begin to develop, they may include:
  - An unexplained 10% loss of body weight within one month
  - Diarrhea for one month or more
  - A white coating on the tongue
  - Enlarged or sore glands in the neck and/or armpit
  - A cough that persists for more than one month
  - Persistent fever of unknown origin
  - Persistent symptoms of vaginitis

Since these symptoms characterize other diseases (a persistent cough may be a symptom of tuberculosis; diarrhea may indicate an intestinal illness), a blood test must be done to confirm the presence of HIV.

HIV-positive persons, especially those who have not yet developed AIDS, normally look as healthy as any other person does. A fat person can be HIV-positive and will pass on the virus before she/he becomes thin.

Who Is at Risk?
- Anyone can become infected with HIV, but only through the means described above. Clients who are at high-risk include:
  - Commercial sex workers
  - Persons who have multiple sexual partners or whose sexual partners have had sexual relations with others
  - Users of intravenous drugs

COUNSELING ADOLESCENTS ON HIV PREVENTION

Goals:
- Change health behavior.
- Nurture leadership skills.
- Link information to services.
- Help adolescents to be proactive.
- Foster responsible decision-making, for example:
  - Abstaining from sex before marriage
  - Using condoms
  - Resisting peer pressure

Special Counseling Tips:
- Encourage and praise behavior that lessens the risk of infection.
- Assist the client in finding alternatives to high-risk behavior.
- Be nonjudgmental.
- Explain risks and dispel myths in an objective manner.
Persons who have received unscreened blood products
Health care workers who have direct contact with infected blood

**Strategies to Prevent HIV Infection and AIDS**

*Infection through Blood-to-Blood Transmission*
- Screening of all blood and blood products for HIV.
- Following universal precautions, which include:
  - Use of protective equipment
  - Safe use and disposal of sharps
  - Sterilization of equipment
  - Safe disposal of contaminated waste products

*Infection through Sexual Contact*
- Promote abstinence or being faithful to one uninfected partner.
- Provide instruction on the consistent and correct use of barrier methods:
  - Male or female condoms for vaginal intercourse
  - Non-lubricated condoms for oral intercourse on a male
  - Dental dams, plastic wrap or latex panties for oral intercourse on a female
  - Condoms for anal intercourse
- Prevent, identify and provide early treatment for STIs.
- Provide access to HIV testing and counseling.

Condoms provide protection from HIV transmission, as well as other STIs when used correctly and consistently.

*Infection through Drug Use*
- Educate about the risks of infection through drug use with contaminated needles and syringes.
- Provide referral for treatment of drug dependence.

**Can HIV Be Treated?**

Though there is no known cure, several different types of drugs exist to treat HIV infection. These drugs attack various aspects of the process used by the virus to replicate itself. Because HIV quickly mutates to become resistant to any single drug, patients must take a combination of drugs to achieve maximum suppression of HIV.

Combination anti-HIV therapy is known as antiretroviral therapy, or ART. ART changes the natural course of HIV infection, significantly extending the period between initial infection and the development of symptoms. To achieve these results, it is important to start therapy before AIDS
symptoms develop. However, even patients who start on therapy after being diagnosed with AIDS often receive major and long-lasting health benefits. Although effective in slowing the progression of HIV-related disease, ART is not a cure. In addition to treatments for HIV infection itself, therapies exist to prevent and/or treat many HIV-related opportunistic infections.

Choice of Contraceptive Methods for Clients with a History of STI and/or HIV/AIDS

It is critical to emphasize dual-method protection for all clients to protect against both STIs and pregnancy. This means that condoms should be used with all methods. When condoms are the primary method, a spermicide should also be used at all times. A woman with chlamydia, gonorrhea, purulent cervicitis or PID should not have an IUD inserted until the infection is resolved. A woman at very high risk of STIs should use an IUD only if no more appropriate contraceptive method is available or acceptable to her; if she does decide to have an IUD inserted, she should then use condoms as well.9
Resources for STI and HIV/AIDS Information


EngenderHealth, Online Mini-Course on STIs and HIV.


World Health Organization (WHO) and the U.S. Centers for Disease Control and Prevention in partnership with the François-Xavier Bagnoud (FXB) Center of the University of Medicine & Dentistry of New Jersey (UMDNJ), School of Nursing. 2008. *Prevention of Mother-to-Child Transmission of HIV Infection Generic Training Package*. 


3 Ibid.


8 World Health Organization (WHO) and the U.S. Centers for Disease Control and Prevention in partnership with the François-Xavier Bagnoud (FXB) Center of the University of Medicine & Dentistry of New Jersey (UMDNJ), School of Nursing. 2008. Prevention of Mother-to-Child Transmission of HIV Infection Generic Training Package.

Infection Prevention and Processing VA Equipment for Reuse

Summary
Infection prevention is of critical importance in minimizing risk to clients, health care workers and the community during the provision of health services. This session introduces infection prevention procedures including a review of standard precautions, the no-touch technique, hand hygiene, glove use and the use of barriers. There is also a section on how to clean and disinfect instruments and other materials for reuse.

Session Objectives
At the end of this session, participants will be able to:
1. Explain the principles of infection prevention, including standard precautions
2. Demonstrate effective hand hygiene procedures
3. Describe the appropriate use of antiseptics and the no-touch technique
4. Demonstrate appropriate gloving practices
5. Demonstrate the use of personal protective equipment
6. Demonstrate the safe handling of sharps
7. Demonstrate the safe disposal of contaminated waste
8. Describe recommended housekeeping practices
9. Demonstrate how to process reusable equipment and other items that are used in the provision of PAC services

Introduction to Infection Prevention in PAC Services
Women receiving PAC services, whether in a hospital or clinic, are at risk of becoming infected unless precautions are taken to prevent infection. Such hospital-acquired, or nosocomial, infections are a significant and growing problem throughout the world. At the same time, health care workers, including support staff (e.g., housekeeping, maintenance and laboratory personnel) are also at risk of exposure to serious, potentially life-threatening infections or diseases. Consequently, it is important that health care workers know and use recommended infection prevention practices when providing PAC services to minimize accidental exposure and injury of clients, providers, staff and the community.

Infection prevention in PAC services has two primary objectives:
- To prevent major infections when providing PAC services.
- To minimize the risk of transmitting serious diseases such as hepatitis B and HIV/AIDS to the client, service providers, other staff and the community.
Microorganisms are the causative agents of infection. They include bacteria, fungi and parasites, which cause local or general infections, as well as viruses such as HIV and hepatitis B. One category of bacteria—endospores—is particularly difficult to kill because of their protective coating, and therefore presents special infection prevention challenges.

Microorganisms live everywhere in the environment and are even carried normally on the skin and in the upper respiratory, intestinal and genital tracts. Some organisms are more pathogenic, or likely to cause disease, than others. Given the right circumstances, all microorganisms may cause infection, such as when transmitted to an immuno-compromised patient with AIDS.\footnote{The right circumstances are not always clear, as some infections can occur even when the immune system is not compromised.}

While all humans are susceptible to infection, the dose of organisms needed to produce infection varies with the location. Intact skin, for example, is generally a good barrier against organisms, while mucous membranes offer a greater risk of infection, requiring fewer organisms for infection to occur. Risk is highest in normally sterile body sites, such as in the uterus or other organs, as only a few microorganisms are needed to produce disease.

Microorganisms are transmitted from blood or body fluids—semen, vaginal secretions, peritoneal fluid, nasal secretions, vomit, feces, urine, amniotic fluid, saliva, etc.—through an entry point in a susceptible host (e.g., person lacking effective natural or acquired protection) such as mucous membranes in the nose or eyes, a break in the skin or needle sticks. Anyone who comes in contact with items soiled by infectious agents or clients’ body fluids is at risk of being infected. This risk not only includes providers, but the many others who may come in contact with these agents such as cleaning personnel, staff who assist or transport patients, people who use items soiled by patients (including family members, spouses, etc.) and community members.

Infection prevention largely depends on placing barriers between a susceptible host and the microorganisms. Protective barriers are physical, mechanical or chemical processes that help prevent the spread of infectious organisms from:

- Person to person (e.g., client, health care worker, staff), and/or
- Equipment, instruments and environmental surfaces to people.

**Standard Precautions**

Many people with blood-borne viral infections do not have symptoms, nor can they be visibly recognized as being infected. Standard precautions are designed for the care of all persons—patients, clients and staff. The standards apply to blood and all other body fluids, secretions and excretions (except sweat), non-intact skin and mucous membranes; this includes all pathological and laboratory specimens. The implementation of standards in PAC and other health care services is meant to reduce the risk of transmitting microorganisms from known or unknown sources of infection.

Standard precautions, as well as other recommended infection prevention practices, are based on the following principles:

- Consider every person (patient or staff) to be potentially infectious and susceptible to infection.
- Be aware that handwashing is the most practical procedure for preventing cross-contamination (person to person or contaminated object to person).

- Wear gloves before touching anything wet—broken skin, mucous membranes, blood or other body fluids (such as excretions or secretions), soiled instruments and contaminated waste materials—or before performing an invasive procedure.

- Use antiseptic agents for cleansing the skin or mucous membrane prior to surgery, cleaning wounds and performing other types of invasive procedures.

- Use barriers if splashes and spills of any body fluids are anticipated. Barriers include protective goggles, face masks and aprons.

- Use safe work practices such as not re-capping or bending needles.

- Safely dispose of infectious waste materials to protect those who handle them and prevent injury or spread of infection to the community.

- Process instruments, gloves and other items after use by first decontaminating them and thoroughly cleaning them, then either sterilizing or high-level disinfecting them using recommended procedures.
Table 4.1-1: Standard Precautions—Key Components

<table>
<thead>
<tr>
<th>Handwashing (or use of an antiseptic handrub):</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Before direct contact with patients, before putting on high-level disinfected or sterile gloves.</td>
</tr>
<tr>
<td>▪ Immediately after touching blood, body fluids, secretions, excretions and contaminated items.</td>
</tr>
<tr>
<td>▪ Immediately after removing gloves.</td>
</tr>
<tr>
<td>▪ Between patient/client contact.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gloves:</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ For contact with blood, body fluids, secretions and contaminated items.</td>
</tr>
<tr>
<td>▪ For contact with mucous membranes and non-intact skin.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Masks, goggles, face masks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Protect mucous membranes of eyes, nose and mouth when contact with blood and body fluids is likely.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gowns:</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Protect skin from blood or body fluid contact.</td>
</tr>
<tr>
<td>▪ Prevent soiling of clothing during procedures that may involve contact with blood or body fluids.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Linen:</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Handle soiled linen to prevent touching skin or mucous membranes.</td>
</tr>
<tr>
<td>▪ Do not pre-rinse soiled linens in patient care areas.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient care equipment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Handle soiled equipment in an appropriate manner to prevent contact with skin or mucous membranes and to prevent contamination of clothing or the environment.</td>
</tr>
<tr>
<td>▪ Clean reusable equipment prior to reuse.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental cleaning:</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Routinely care for, clean and disinfect equipment and furnishings in patient care areas.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sharps:</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Avoid re-capping used needles.</td>
</tr>
<tr>
<td>▪ Avoid removing used needles from disposable syringes.</td>
</tr>
<tr>
<td>▪ Avoid bending, breaking or manipulating used needles by hand.</td>
</tr>
<tr>
<td>▪ Place used sharps in puncture-resistant containers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient resuscitation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Use mouthpieces, resuscitation bags or other ventilation devices to avoid mouth-to-mouth resuscitation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient placement:</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Place patients who contaminate the environment or cannot maintain appropriate hygiene in isolation rooms.</td>
</tr>
</tbody>
</table>


**Hand Hygiene**

Hand hygiene, which includes both handwashing and the use of alcohol-based antiseptic solutions, is the single most important step in preventing infection. Hand hygiene practices are intended to prevent hand-borne infections by removing dirt and debris and inhibiting or killing microorganisms on skin. Hand hygiene interrupts the transmission of disease agents and consequently can significantly reduce diarrhea and respiratory infections as well as skin infections and trachoma. A recent review suggests that handwashing with soap can reduce diarrheal incidence by 42–47%.
Further, ongoing research suggests that a 30% reduction in respiratory infections is possible through handwashing.

**Handwashing**

The purpose of handwashing is to mechanically remove soil and debris from the skin and reduce the number of transient microorganisms. Handwashing with plain soap and clean water is as effective as washing with antimicrobial soaps. In addition, plain soap causes much less skin irritation.

PAC providers should wash their hands **before**:

- Examining (direct contact with) clients
- Putting on examination, high-level disinfected or sterile gloves prior to procedures
- Eating

They should wash their hands **after**:

- Using the rest room
- Removing gloves, as there may be tiny holes or tears that allow contaminants to come in contact with the skin and bacteria can rapidly multiply on gloved hands due to the moist, warm environment within the glove
- Any situation in which hands are visibly dirty or soiled with blood or body fluids
- Any situation in which hands may become contaminated, even if not visibly soiled, such as:
  - Handling soiled instruments, wound dressings and other items in the immediate vicinity of the patient
  - Touching mucous membranes, blood or other body fluids
  - Having contact with a patient’s intact skin
  - Having prolonged and intense contact with a patient
  - Having contact with a contaminated-body site and moving to a clean-body site during patient care

Although handwashing has been recognized as an important measure to prevent the spread of infections for more than 150 years, it is still difficult to get health care workers to follow recommended handwashing practices. Key reasons for not washing hands include lack of time, limited access to sinks and running water, skin irritation resulting from frequent washing, belief that wearing gloves provides total protection, and doubt regarding the effectiveness of handwashing to prevent infections. While education and a variety of behavior change activities have proven to be the most effective in improving provider compliance, it is also important to make every effort to provide soap and a continuous supply of clean water, either from the tap or a bucket, and single-use towels.
The steps for routine handwashing are:

**STEP 1**: Thoroughly wet hands.

**STEP 2**: Apply plain soap (antiseptic agent is not necessary).

**STEP 3**: Vigorously rub all areas of hands and fingers together for at least 10–15 seconds, paying close attention to areas under fingernails and between fingers.

**STEP 4**: Rinse hands thoroughly with clean water.

**STEP 5**: Dry hands with a paper towel and use the towel to turn off the faucet.

If paper towels are not available, dry hands with an individual, clean towel or air-dry. Shared towels quickly become contaminated, however, and should not be used. PAC providers can carry their own small towel or handkerchief, which should be washed daily, to help avoid using dirty towels.

For PAC providers who wash their hands frequently (30 or more times per shift) hand lotions and creams should be provided to reduce irritation of the skin, even when plain soap is used.

Because microorganisms grow and multiply in moisture and standing water:

- If bar soap is used, provide small bars and soap racks that drain.
- Avoid dipping hands into basins containing standing water. Even with the addition of an antiseptic agent, microorganisms can survive and multiply in these solutions.
- Do not add soap to a partially empty liquid soap dispenser. This practice of “topping off” dispensers may lead to bacterial contamination of the soap.
- When no running water is available, use a bucket with a tap that can be turned off to lather hands and turned on again for rinsing, or use a bucket and pitcher.

**Hand Antisepsis**

The goal of hand antisepsis is to remove soil and debris as well as to reduce both the organisms normally on the skin and any others currently present. The technique is similar to that for plain handwashing, but uses soap that contains an antiseptic agent.

Hand antisepsis should be used before:

- Examining or caring for highly susceptible patients (e.g., those with advanced AIDS); and
- Performing an invasive procedure such as placement of an intravascular device.

Using soaps containing antiseptics is more irritating than using antiseptic handrubs; therefore, if antiseptic handrubs are available, they should be used instead.

**Antiseptic Handrub**

Use of an antiseptic handrub is more effective in killing microorganisms than handwashing with antimicrobial agents or plain soap and water. It is quick and convenient to perform, and gives a
greater initial reduction in hand flora. These handrubs also contain a small amount of an emollient that protects and softens the skin.

The steps for performing an antiseptic handrub are:

**STEP 1**: If hands are visibly soiled or contaminated with blood or body fluids, they should be washed with soap and water first.

**STEP 2**: Apply enough antiseptic handrub to cover the entire surface of hands and fingers (about 5 ml or one teaspoonful) for it to be effective.

**STEP 3**: Rub the solution vigorously into hands, especially between fingers and under nails, until dry, about 15–30 seconds.

To prevent a build-up of emollients on the skin from repeated use, it is recommended that hands be washed with soap and water after every five to 10 applications.

An effective antiseptic handrub is inexpensive and easy to make by adding glycerin, propylene glycol or sorbitol to alcohol (2 ml in 100 ml of 60–90% ethyl or isopropyl alcohol solution).

### Surgical Handscrub

While handwashing with plain or antimicrobial soap or using an antiseptic handrub is generally adequate for providing PAC services in an outpatient setting, some procedures, such as D&C, when performed in the operating theater, will require a surgical handscrub. Based on studies demonstrating that traditional approaches to surgical handscrubs using vigorous scrubbing with brushes and sponges are unnecessary and may even be ineffective, the general surgical scrub technique has been modified to be less harsh and less time-consuming.

The steps of a surgical handscrub include:

**STEP 1**: Remove rings, watches and bracelets.

**STEP 2**: Thoroughly wash hands, especially between fingers, and forearms to the elbows with soap and water.

**STEP 3**: Clean nails with a nail cleaner.

**STEP 4**: Rinse hands and forearms with water.

**STEP 5**: Apply an antiseptic agent to all surfaces of hands and forearms to the elbows and rub hands and forearms vigorously for at least two minutes.

**STEP 6**: Holding the hands higher than the elbows, rinse hands and forearms thoroughly with clean water.

**STEP 7**: Keep hands up and away from the body, do not touch any surface or article, and dry hands and forearms with a sterile towel or air-dry.

**STEP 8**: Put sterile or high-level disinfected surgical gloves on both hands.
Applying an antiseptic minimizes the number of microorganisms on hands under the gloves and minimizes growth of flora during surgery.

Another alternative is to wash hands and forearms with soap and water and, after drying, to apply an antiseptic handrub to the hands and forearms, rubbing until dry. The application and rubbing until dry should be repeated at least two more times, for a total of two minutes, using at least 15 ml (three teaspoons) of the handrub. Gloves are then put on as usual.

**Antisepsis**

Infection following surgical procedures such as VA and D&C may be caused by microorganisms from the skin, cervix or vagina of the patient or from the hands of the health care worker. Washing hands before and after the procedures as has been described, as well as washing the patient’s perineal area and thoroughly cleaning her cervix and vagina with antiseptic solution prior to performing the procedure, is key to preventing such infections.

Many chemicals qualify as safe skin antiseptics. The following antiseptic solutions are commonly available:

- Chlorhexidine gluconate (4%) (e.g., Hibiclens®, Hibiscrub®, Hibtane®)
- Chlorhexidine gluconate and cetrimide, various concentrations (e.g., Savlon)
- Iodophors, various concentrations (e.g., Betadine®)

For vaginal and cervical preps, prior to inserting the VA cannula or D&C curette, use an aqueous (water-based) antiseptic, such as an iodophor (povidone-iodine) or chlorhexidine gluconate. **Do not use alcohol or alcohol-containing preparations** as they burn, dry and irritate mucous membranes, which can promote the growth of microorganisms. Hexachlorophine (e.g., pHisoHex®), which is neurotoxic and readily absorbed by mucous membranes, should not be used. See Table 4.1-7 for more information on antiseptics and their use.

If the perineal area is visible soiled, clean with soap and water and dry it before using the antiseptic. Then, after inserting the speculum, apply antiseptic solution liberally to the cervix and vaginal walls two times. If an iodophor is used, allow time (two minutes) before proceeding to ensure that full antimicrobial action has taken place.

**Note:** Antiseptic solutions are not appropriate for high-level disinfection of inanimate objects, such as instruments, as they do not have adequate killing power. See the section on high-level disinfection for more information on which agents are effective for that purpose.

**No-Touch Technique**

When advancing the VA cannula into the uterine cavity, it is possible to introduce pathogens that may result in serious infection. To avoid infections, providers should use the no-touch technique throughout the procedure as well as sterile or high-level disinfected instruments.
Using the no-touch technique means that the part of the cannula or any other instrument that enters the uterine cavity should not come in contact with contaminated surfaces before passing through the cervix. In other words, the tenaculum or cervical dilator tip (if used) as well as the cannula itself must not touch the examination table, un-sterile areas of the instrument tray, gloves or vaginal walls before they are inserted. The instruments should be handled only by those parts that will not come in contact with the patient. Finally, instruments should pass through the cervical os as few times as possible.

**Gloves**

Although gloves have proven to be very effective in preventing the contamination of health workers’ hands, *wearing gloves does not replace the need for handwashing* in PAC services. Even the highest quality gloves may have tears or holes too small to see or gloves may be torn during use, which can contaminate hands. Hands should be washed or an antiseptic handrub used before putting gloves on and after taking them off.

Gloves should be worn when:

- There is a reasonable chance of hand contact with blood or other body fluids, mucous membranes or non-intact skin.
- Invasive medical procedures are being performed.
- Contaminated waste items are handled or contaminated surfaces are touched.

Gloves that become visibly soiled, torn or punctured during the provision of PAC services should be changed as soon as possible.

A separate pair of gloves must be used for each patient to avoid cross-contamination. Wearing the same pair of gloves and washing gloved hands between patients or between dirty- to clean-body site care is not a safe practice. Washing gloved hands has proven to leave significant amounts of bacteria. It is also important that gloves be used only when needed. It is not uncommon for health workers to wear gloves when they are not needed, for example, for taking blood pressures, writing in charts, using the telephone—that is, when there is no contact with blood or other body fluids. This practice may make workers feel more protected but, in fact, may lead to greater spread of microorganisms because workers may not change gloves or wash their hands for prolonged periods of time. It is also an unnecessary use of an often scarce resource, leading to shortages of gloves for those tasks that really require them.

**Types of Gloves**

There are three types of gloves used in PAC services:

- Sterile or high-level disinfected *surgical gloves* that are used when performing invasive medical or surgical procedures, e.g., procedures involving contact with tissue deep under the skin, such as D&C or VA procedures;
- **Examination gloves** that provide protection during many routine duties involving contact with mucous membranes and non-intact skin, e.g., pelvic examination; and

- **Utility or heavy-duty household gloves** that should be worn for processing instruments or other contaminated equipment and items, for handling contaminated waste and when cleaning contaminated surfaces.

Surgical gloves are usually made of latex rubber because of its elasticity, sensitivity, durability and comfort. They are sized to fit, permitting greater movement during surgical procedures. For these reasons, they are expensive and therefore should not be used for tasks where other types of gloves can be used. The growing problem of latex allergy has led to the development of a synthetic, rubber-like material, “nitrile.” Non-latex, or nitrile, surgical gloves may not be widely available in many countries, however.

The most commonly available examination gloves are made of vinyl, making them relatively inexpensive when compared to surgical gloves. Because vinyl is inelastic, these gloves are loose fitting (only small, medium and large sizes) and can tear easily. Better quality examination gloves made of latex may be available in many countries as well.

Utility gloves are made of thick rubber, so they are less flexible and sensitive, but also provide maximum protection as a barrier. They are inexpensive and can be rewashed and reused many times. The thick rubber surface is especially effective in protecting cleaning personnel and waste handlers.

The following table lists some of the tasks and activities that are part of PAC services and indicates whether gloves are needed and the type of glove to use.
### Table 4.1-2: Glove Requirements for Common PAC Procedures

<table>
<thead>
<tr>
<th>Task or Activity</th>
<th>Are Gloves Needed?</th>
<th>Type of Glove to Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood pressure check</td>
<td>No</td>
<td>–</td>
</tr>
<tr>
<td>Temperature check</td>
<td>No</td>
<td>–</td>
</tr>
<tr>
<td>Injection</td>
<td>No</td>
<td>–</td>
</tr>
<tr>
<td>Blood drawing</td>
<td>Yes</td>
<td>Examination</td>
</tr>
<tr>
<td>IV insertion and removal</td>
<td>Yes</td>
<td>Examination</td>
</tr>
<tr>
<td>Pelvic examination</td>
<td>Yes</td>
<td>Examination</td>
</tr>
<tr>
<td>IUD insertion (loaded in sterile package and using no-touch technique)</td>
<td>Yes</td>
<td>Examination</td>
</tr>
<tr>
<td>Manual vacuum aspiration (using no-touch technique)</td>
<td>Yes</td>
<td>Examination</td>
</tr>
<tr>
<td>D&amp;C</td>
<td>Yes</td>
<td>HLD or sterile surgical</td>
</tr>
<tr>
<td>Norplant implant insertion</td>
<td>Yes</td>
<td>HLD or sterile surgical</td>
</tr>
<tr>
<td>Vasectomy or laparotomy</td>
<td>Yes</td>
<td>HLD or sterile surgical</td>
</tr>
<tr>
<td>Handling and cleaning instruments</td>
<td>Yes</td>
<td>Utility</td>
</tr>
<tr>
<td>Handling contaminated waste</td>
<td>Yes</td>
<td>Utility</td>
</tr>
<tr>
<td>Cleaning blood or body fluid spills</td>
<td>Yes</td>
<td>Utility</td>
</tr>
</tbody>
</table>

**Note:** If no-touch technique is not used, then high-level disinfection (HLD) or sterile surgical gloves must be used.

---

**Personal Protective Equipment**

Protective barriers, which are now known as personal protective equipment, include: gloves (which have already been discussed), masks, eyewear (face shields, goggles or glasses), caps, gowns, aprons and other items. While some of these are extremely important in reducing the risk of transmitting infection, others are used despite there being no real proof of their effectiveness. This practice can increase the cost of providing services without increasing their quality or safety.

**Masks** are used to contain moisture droplets expelled as health workers or surgical staff speak, cough or sneeze, as well as to prevent accidental splashes of blood or other contaminated body fluids from entering workers’ noses and mouths. Unless they are made of fluid-resistant materials and cover the worker’s nose, lower face, jaw and facial hair, they are not very effective in preventing either—masks made of cloth or paper are generally ineffective. In the provision of PAC services, the risk of splashing and the availability of face shields or visors should be assessed when deciding whether or not a mask is needed. When D&C is being performed in the operating theater, however, a mask is generally used.
**Eyewear** protects staff in the event of an accidental splash of blood or other body fluid by covering the eyes. Eyewear includes clear plastic goggles, safety glasses, face shields and visors. Prescription glasses or glasses with plain lenses are also acceptable. They should be worn whenever an accidental splash is likely, for example, when cleaning instruments. They should be used when performing VA in an outpatient setting (as splashing may occur when the provider empties the syringe during MVA) or if there are problems with the suction.

**Caps** are used to keep the hair and scalp covered so that flakes of skin and hair are not shed into the wound during surgery, and should be worn when D&C is performed in the operating theater. Caps need to cover all the hair to be effective. They also serve to protect the user from splashes of blood or body fluids and so may also be used in outpatient settings.

**Scrubsuits or covergowns** are worn over, or instead of, street clothes to prevent damage to the worker’s own clothing. Once wet or soiled, they are much less effective as a barrier to infection transmission. Unless soiling of clothes is likely, they are not necessary and may be an extra expense. It may be more cost-effective to provide workers with **aprons** to protect their clothing. **Surgical gowns**, especially if made of fluid-resistant material, help keep blood and body fluids off the skin of personnel as well protect the patient from the worker’s microorganisms during surgery.

**Aprons** made of rubber or plastic provide a waterproof barrier along the front of the health worker’s body. An apron should be worn when cleaning or during a procedure in which blood or body fluid spills are anticipated, as may be the case in PAC services. Aprons can also be used to keep scrubsuits or covergowns dry and clean, thereby decreasing cleaning costs and improving their effectiveness as a barrier.

**Footwear** is worn to protect feet from injury by sharps or heavy items that may fall on them. Rubber or leather boots or shoes are recommended; thongs, sandals or cloth shoes are not. Footwear must be kept clean and free of contamination from blood and body fluids. If clean, sturdy shoes are available for use only in the surgical area, shoe covers are not needed. The effectiveness of shoe covers is questionable when they are soaked with blood or body fluid and/or worn outside the operating area, as is common practice.

**Drapes** are usually made of hemmed linen squares of varying sizes. In the operating area, sterile drapes are used to create a sterile barrier around the wound or vaginal opening, such as when performing D&C; in the outpatient area, they are often clean rather than sterile. Such drapes are also used to maintain privacy for the patient by covering most of the genital area.

**Safe Handling of Sharps**

Sharps refer to any sharp objects or instruments used for health care, which include scalpels, needles, suture needles, IV catheters and razor blades. During a clinical procedure, health care workers can accidentally stick themselves, fellow workers or a client when passing sharps, especially when there is sudden motion by staff members carrying unprotected sharps, when clients move suddenly during injections or when sharps are left lying in areas where they are unexpected (such as on or under surgical drapes).
Injuries from sharp instruments are the most common way that HIV, hepatitis B and hepatitis C are transmitted in health care situations. To protect yourself from needles sticks and other injuries, use the following precautions:

- Keep handling of sharp instruments to a minimum—pass to another person on a tray rather than from hand to hand.
- Always have puncture-proof containers for disposal of sharps within comfortable reach.
- Do not recap, bend or break needles before disposal; dispose of them directly into a puncture-proof container.
- If a needle must be recapped, use the “one-handed” technique (see below).

First, place the needle cap on a firm, flat surface; then remove hand.

Next, with one hand holding the syringe, use the needle to “scoop” up the cap.

With the cap now covering the tip, turn the syringe upright (vertical) so the needle and syringe are pointing toward the ceiling.

Finally, using the forefinger and thumb of the other hand, grasp the cap just above its open end and push the cap firmly down onto the hub of the needle.

While manufactured sharps containers (puncture-proof containers) are available, they can be expensive and are not widely available. They can, instead, be fashioned out of a variety of readily available “throw-away” items, such as metal cans, heavy plastic bottles or containers, and heavy-duty cardboard boxes. Although some are safer than others, all provide a low-cost, sustainable source of disposable sharps containers.

Some things to keep in mind when using any type of sharps containers include:

- Put sharps containers as close to the point of use as possible and make them easy to see and use; mark them clearly so they will not be used for other purposes.
Avoid placing them in high-traffic areas or too high or too low for comfortable or safe use.

Fill the container only three-quarters full and then replace them. Mark a fill line at three-quarters full so it is clear when it is time to replace them:

- When the container is full, encapsulation is the easiest way to safely dispose of the sharps. Cement, foam or clay is poured into the container to fill it completely. When hardened, seal the container and it can be sent to the landfill or buried.

- If encapsulation is not possible, cap or seal the container and then burn or bury it to reduce the chance that the contents will be picked up or reused.

Do not shake the sharps container to settle its contents and make room for more needles.

If you are accidentally exposed to blood or other body fluids, either by a needle stick, an injury from another sharp object or a splash of fluid:

- Wash the needle stick or cut with soap and water.

- Flush splashes to the nose, mouth or skin with water.

- Irrigate splashes to the eyes with water or saline.

**Post-Exposure Prophylaxis**

If you, a coworker or a client has been exposed to blood or other body fluids, consult an infectious disease specialist familiar with post-exposure prophylaxis.

Post-exposure prophylaxis with drugs or other therapy can reduce the risk of transmission of some blood-borne pathogens. Whether post-exposure prophylaxis is indicated following exposure to blood or other body fluids depends on a number of factors, including the infection status of the client whose blood or fluids are involved, the type of exposure (a splash to the skin versus a deep puncture wound), whether or not the exposed person has been vaccinated against hepatitis B, how much time has passed since the exposure, and the availability of needed drugs or other therapy. Some therapies include:

**Hepatitis B**: Hepatitis B immune globulin and hepatitis B vaccine can reduce the risk of infection after exposure to blood or other body fluids containing the hepatitis B virus.

**HIV**: Several antiretroviral drugs, used either alone or in combination, have been recommended to reduce the risk of HIV transmission following accidental exposure in health care workers. These include zidovudine (AZT, Retrovir), lamivudine (3TC, Epivir), indinavir (Crixivan) and nelfinavir (Viracept).

**Hepatitis C**: There is no post-exposure prophylaxis available for hepatitis C. Neither immune globulin nor antiviral drugs have been shown to reduce the risk of hepatitis C transmission. All staff who are at risk of exposure to blood or body fluids should be vaccinated against the hepatitis C virus if available.
Waste Disposal
Waste can be either contaminated (potentially infectious) or non-contaminated. Most waste is non-contaminated and can be disposed of by the usual methods or sent to the local landfill or dump. Examples include paper, boxes, bottles and food. Handling contaminated solid or liquid waste, however, carries risk of infection. Contaminated wastes include blood, pus, urine, stool and other body fluids, as well as items that come in contact with them, such as used dressings or medical devices. Such waste must therefore be disposed of carefully and according to recommended infection prevention practices in order to prevent injury or infection in people who handle waste items, health care providers and the local community.

Disposal of Contaminated Wastes
Proper disposal of contaminated wastes includes:

- Pouring liquids or wet waste directly into a safe sewage system, or if such a system does not exist, pouring liquids into a deep hole and covering.
- Incinerating (burning) items to destroy both the item and the microorganisms on it. This is the best method for disposing of contaminated waste. Burning also reduces the bulk volume of waste and ensures that the items are not scavenged and reused.
- Burying all contaminated waste to prevent further handling.

Recommended practices for managing contaminated waste include the following:

- Use leak-proof plastic or metal waste containers with tight-fitting lids. They can be lined with plastic bags to facilitate emptying the containers and minimize handling of the waste.
- If possible, use separate containers for disposing of burnable and non-burnable contaminated waste to further minimize handling the waste.
- Use puncture-proof sharps containers for all disposable sharps.
- Place waste containers close to where the waste is generated and where it is convenient for users.
- Wash all waste containers with disinfectant cleaning solution and rinse with water regularly; do not use these containers for any other purpose.
- Use utility gloves and other protective equipment (e.g., aprons, face shields, closed shoes) when handling contaminate waste.
- Wash hands or use a waterless, alcohol-based antiseptic handrub after removing gloves when handling waste.

All health care workers and housekeeping staff must be trained to keep contaminated and non-contaminated waste separate.

Housekeeping
The general cleanliness and hygiene of a facility are vital to the health and safety of staff, clients, visitors and the community. Good housekeeping practices and waste disposal practices are the foundation of infection prevention.
Although certain areas of the clinic or hospital require special housekeeping procedures, the following list applies to all areas:

- Routine cleaning is necessary to maintain a standard of cleanliness. Develop and post cleaning schedules where all housekeeping staff can see them. Make sure the schedules are closely followed.
- Wear gloves, and other protective equipment as needed, when cleaning.
- To reduce the spread of dust and microorganisms, use a damp or wet mop or cloth for walls, floors and surfaces instead of dry-dusting or sweeping.
- Scrubbing is the most effective way to remove dirt and microorganisms and should be part of every cleaning procedure.
- Cleaning should progress from the least soiled areas to the most soiled areas and from top to bottom so that debris falls to the floor and is cleaned up last.
- Cleaning products should be selected based on their use, efficacy, safety and cost.
- Change cleaning solution whenever it appears to be dirty, as it will not be as effective at killing microorganisms if it is heavily soiled.

Cleaning Procedures for Client Care Areas

Low-risk areas such as waiting rooms and administrative areas are usually not contaminated with infectious microorganisms. Routine cleaning—the kind of cleaning that you would do in your home—is usually good enough for these areas. They should be cleaned once a week or whenever they appear to be dirty with a cloth or mop dampened with detergent and water.

Areas such as toilets, latrines and sluice rooms are usually heavily contaminated and should be cleaned daily or more often if they are heavily used. Remember to use different mops and cloths for these areas than are used for cleaning patient care areas.

Client care areas must be cleaned carefully using a disinfectant cleaning solution. As the potential for contamination is greater in these areas—even when it is not visible—there is great concern for the potential transmission of infection to both clients and staff. The table below outlines which cleaning tasks should be performed at the indicated times.
Table 4.1-3: Cleaning Schedule: Client Care Areas

<table>
<thead>
<tr>
<th>At the beginning of each day</th>
<th>At the end of each clinic session or day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean horizontal surfaces—operating/procedure tables, examination couches, chairs, trolley tops or Mayo stands, lamps, counters and office furniture—with a cloth dampened with water, and clean floors with a mop dampened with water to remove dust and lint that have accumulated overnight.</td>
<td>Wipe down all surfaces—including counters, tables, sinks, lights, door handles/plates and walls—with a cloth dampened with a disinfectant cleaning solution or spray the solution onto the surface using a spray bottle and wipe them down. Remember to wipe from top to bottom. Pay particular attention to operating/procedure tables, making sure to clean the sides, base and legs thoroughly. Rinse sinks with clean water after cleaning.</td>
</tr>
<tr>
<td>Between clients</td>
<td>Clean operating/procedure tables, examination couches, chairs, trolley tops or Mayo stands, lamps, counters and any other potentially contaminated surfaces in operating theaters and procedure rooms with a cloth dampened with a disinfectant cleaning solution. Alternatively, spray the solution onto the surfaces, using a spray bottle, and wipe with a cloth dampened with water.</td>
</tr>
<tr>
<td></td>
<td>Clean spills of blood or other body fluids with a 0.5% chlorine solution immediately.</td>
</tr>
<tr>
<td></td>
<td>Clean visibly soiled areas of the floor, walls or ceiling with a mop or cloth dampened with a disinfectant cleaning solution.</td>
</tr>
<tr>
<td></td>
<td>Put waste in a leak-proof container; empty the container when it is three-quarters full.</td>
</tr>
<tr>
<td></td>
<td>Clean visibly soiled areas of the floor, walls or ceiling with a mop or cloth dampened with a disinfectant cleaning solution.</td>
</tr>
<tr>
<td></td>
<td>Clean the floors with a mop soaked in a disinfectant cleaning solution.</td>
</tr>
<tr>
<td></td>
<td>Check sharps disposal containers and remove and replace them if three-quarters full.</td>
</tr>
<tr>
<td></td>
<td>Remove medical or hazardous chemical waste, making sure to burn or bury it as soon as possible to limit contact with potentially infectious waste.</td>
</tr>
<tr>
<td></td>
<td>Wash waste containers with a disinfectant cleaning solution and rinse with water.</td>
</tr>
<tr>
<td>Each week</td>
<td>Clean ceilings with a mop dampened with a disinfectant cleaning solution.</td>
</tr>
</tbody>
</table>


Processing Equipment and Other Items for Reuse

Appropriate processing of all reusable equipment and items, such as gloves, is critically important in order to minimize the risk of transmitting infection to both patients and staff. Contaminated equipment and reusable items must be decontaminated, cleaned and then either high-level disinfected or sterilized to be safe for reuse. It is important that safe practices be used during processing.

Decontamination

Decontamination is the process that makes objects safer to be handled by staff, especially cleaning personnel and staff who perform further processing, by killing viruses, such as hepatitis B and HIV. It also makes cleaning easier by preventing blood and other body fluids from drying on the objects. It does not, however, remove all blood and body fluids, tissue and dirt, so cleaning is also required.

To decontaminate items, use a 0.5% chlorine solution, which is the most frequently used due to its low cost and availability, or a solution made from another acceptable disinfectant (see Figure 4.1-1 on preparing a dilute chlorine solution and Tables 4.1-4, 4.1-5 and 4.1-6 on use of other disinfectants). Guidelines for decontamination include:
Immediately after use, place instruments and other items in a plastic container of 0.5% chlorine solution. Avoid splashing the solution.

Make sure that all instruments and other items are completely submerged in the chlorine solution.

Let the items soak for 10 minutes. Do not leave items in the solution for more than 10 minutes as excessive soaking can damage them.

Wear utility gloves when removing instruments and other items from the chlorine solution.

Either rinse the items in clean water or clean immediately. It may be useful to keep a bucket of clear water next to the container of decontamination solution for this purpose. Items can be left in the clean water until staff are ready to clean them.

Keep a container of chlorine solution in each operating theater and procedure room so that items can be placed directly into the container without additional handling.

Decontamination solutions should be changed daily or when visibly contaminated.

Before removing contaminated gloves, dip gloved hands into the decontamination solution to rinse the outer surface. Carefully remove them without touching the outer surface with bare hands:

- If the gloves are disposable or damaged, dispose of them properly.
- If they are surgical gloves to be processed for reuse, place them in 0.5% chlorine solution and soak for 10 minutes before cleaning. To avoid damaging gloves, it is best to use a separate container for them.

Reusable needles and syringes should be filled with 0.5% chlorine solution and flushed several times, and then left to soak for 10 minutes. Rinse by flushing several times with clean water and then clean.

The MVA cannula should be left attached to the syringe and flushed with chlorine solution once or twice. The assembled cannula and syringe should then be soaked for 10 minutes before flushing with clean water and cleaning.

Surfaces such as examination or procedure tables should also be decontaminated. They should be wiped down with 0.5% chlorine solution after each patient, whenever visibly contaminated and at the end of the day.

Cleaning

Cleaning physically removes organic material, dirt and foreign matter that can interfere with sterilization or high-level disinfection. It also reduces the number of microorganisms, including bacterial endospores, on instruments and other items.

Cleaning refers to scrubbing with a brush, detergent and water. Detergent is important for effective cleaning as it removes protein, oils and grease. Hand soap should not be used as it can leave a residue or scum. Steel wool and abrasive cleaners also should not be used as they can damage the items.
Always wear utility gloves, mask and protective eyewear when cleaning instruments and other items.

Use a soft brush or old toothbrush, detergent and water to scrub instruments and other items vigorously. Hold the items under water while scrubbing to avoid splashing.

When possible, instruments should be disassembled for cleaning.

Be sure to clean in grooves, teeth and joints where organic material can collect and stick.

Rinse items thoroughly with clean water to remove all detergent. Detergent left on the item can interfere with further processing.

Allow items to air-dry or dry them with a clean cloth, especially if they will be processed further with chemical solutions. Water left on the items can dilute the chemical and decrease its effectiveness.

Reusable needles and syringes should be disassembled and washed. Reassemble and flush with clean water at least three times. Detach the needle and examine it to be sure the hub area is clean, the needle is not bent and the tip is not damaged. Check the syringe to make sure the seal is good and markings are readable. Air-dry needles; air- or towel-dry syringes.

Gloves require careful handling during cleaning. Do not scrub them with a brush! After washing, check for holes by filling them with air and holding them under water (air bubbles will appear if there are holes) or fill them with water to check for leaks. Towel-dry or air-dry, inside and out.

Cleaning MVA Instruments
Disassemble the syringe completely, including removing the collar stop and the O-ring on the plunger (on a double-valve syringe, also remove the O-ring from inside the valve). Wash all parts with detergent and water. Use a soft brush to scrub the syringe; do not use a brush or other object to try to remove blood or tissue from the tip of the cannula; this may cause scratches that can trap microorganisms or damage the tip, increasing the risk of breakage. Try to dislodge the material with water by flushing the cannula or flicking the tip with a gloved finger. Rinse with clean water and air-dry. Dry the syringe thoroughly before reassembling it.

Sterilization or High-Level Disinfection (HLD)
Sterilization kills all microorganisms including the bacterial endospores that cause tetanus and gangrene. Because it kills all microorganisms, it is recommended for items such as needles and surgical instruments, including those used for D&C, which come in contact with the bloodstream or tissues under the skin. HLD kills all microorganisms (bacteria, viruses, fungi and parasites) except bacterial endospores. When sterilization is unavailable, HLD is the only acceptable alternative for protecting clients and staff against infection. HLD is also suitable for items that will come in contact with broken skin or intact mucous membranes.

Sterilization
The effectiveness of any method of sterilization depends on the amount and type of microorganisms, organic material and other matter present on the item and the amount of protection that the item
gives the microorganisms (such as grooves where they can hide). Therefore, it is important to thoroughly clean items before sterilization.

There are three methods of sterilization: steam sterilization (also known as “autoclaving” or “moist heat under pressure”), dry heat sterilization (electric oven) and chemical (“cold”) sterilization. While it is beyond the scope of this curriculum to describe appropriate practices for all types of sterilization, there are many excellent resources that can be used.

Recommended resources include:


These resources should be consulted for information on sterilization of the instruments used in D&C. Here are a few tips specific to the sterilization of MVA equipment:

- The MVA syringe does not require sterilization as it does not come in contact with the client and is used only as a source of vacuum and as a receptacle for blood and tissue. In fact, the syringe does not require processing beyond decontamination and cleaning unless local protocols say otherwise.
- Most MVA syringes or cannulae cannot withstand the heat of steam or dry heat sterilization and thus those processes must not be used. Only the MVA Plus® syringe is able to be steam autoclaved and boiled.
- It is best to chemically sterilize the cannula (and the syringe if desired). The most commonly used chemicals are glutaraldehyde (the most widely used) and formaldehyde. It is critically important to follow all of the manufacturer’s directions carefully and completely when preparing and using these chemicals, including how often to change the solution.
- Be sure that all parts are submerged in the chemical solution and both the syringe (if being sterilized) and the cannulae are filled with solution as well.
- After soaking for the indicated time, rinse the cannula (and syringe) with sterile water.
- Dry with a sterile towel and store in a sterile, covered container.
- Low-level disinfectants or antiseptics such as Hibitane or Savlon will not kill microbes on cannulae and must not be used for this purpose.

**Note:** Boiling is not a method of sterilization.

**High-Level Disinfection (HLD)**

As with sterilization, the effectiveness of HLD depends on the amount and type of microorganisms, organic material and other matter present on the item and the amount of protection that the item gives the microorganisms (such as grooves where they can hide). Therefore, it is important to...
thoroughly clean items before high-level disinfection. There are three methods of high-level disinfection: boiling, chemical HLD and steaming.

**Boiling:** HLD by boiling is a simple procedure and can be performed wherever there is clean water and a heat source. Instruments and other items are placed in a pot or boiler and the water is heated to boiling for 20 minutes.

- Open all hinged instruments or disassemble those with multiple parts before placing them in the pot. Place all bowls or containers right-side up, not upside down, and fill with water. It is important that all surfaces come in contact with water. Completely submerge all items.
- Cover the pot or boiler and bring the water to a gentle boil.
- When the water comes to a rolling boil, start timing for 20 minutes. Once timing begins, do not add or remove anything from the pot or boiler.
- Lower the heat if necessary to prevent the water from boiling too vigorously and boiling away.
- After 20 minutes, remove the items using dry, high-level disinfected forceps or pickups. Place them in a high-level disinfected tray or container and let them air-dry before using.
- Use the instruments immediately or store in a covered, high-level disinfected container for up to one week.

**Note:** Research has shown that MVA cannulae do not have to be submerged for boiling to be effective; however, the boiler must be kept covered during the process. It is also inadvisable to boil the MVA syringe as it can damage the valve. If your facility uses the MVA Plus syringe, follow the instructions for high-level disinfection.

**Chemical HLD:** Chemical HLD is used for heat-sensitive items, such as the MVA syringe, or when a heat source is not available. Unlike chemical sterilization, both chlorine 0.1% and glutaraldehyde can be used, the soaking time is shorter, and boiled water can be used for rinsing. The following chemicals should **not** be used as they are ineffective: hydrogen peroxide, alcohol, iodophors, sporocidin, carbolic acid and various antiseptics such as chlorhexidine gluconate with cetrimide (Savlon), chlorhexidine gluconate (Hibitane, Hibiscrub) and chloroxylenol (Dettol).

- Prepare the solution according to the manufacturer’s instructions (glutaraldehyde) or the formula on chlorine (see Figure 4.1-1). Follow the instructions regarding how often to change the solution (glutaraldehyde) or change it daily or if visibly cloudy (chlorine).
- Open all hinged instruments or disassemble those with multiple parts before placing them in the pot. Place all bowls or containers right-side up, not upside down, and fill with solution. It is important that all surfaces come in contact with the solution. Completely submerge all items.
- Cover the container and allow the items to soak for 20 minutes. Do not add or remove any items during this period.
- After 20 minutes, remove the items using dry, high-level disinfected forceps or pickups.
- Rinse the items thoroughly with boiled water to remove all solution, which can damage tissues.
Place them in a high-level disinfected tray or container and let them air-dry before using.
Use the instruments immediately or store in a covered, high-level disinfected container for up to one week.

**HLD by steaming:** Items are steamed in a container with one to three tiers. Steaming is the best HLD method for gloves and is a useful method of HLD for the cannulae used during MVA.

- Place water in the bottom tier (tray without holes) of the steamer.
- Place items to be high-level disinfected in the other trays and stack on top of the bottom tray. Cover the top tray.
- Bring the water in the bottom tray to a boil. When steam comes out between the trays, the water is boiling.
- Reduce the heat to a rolling boil and time for 20 minutes.
- Remove each of the trays and shake off the excess water. Place the trays on a second bottom tray, without holes, to prevent contamination.
- Use items immediately or allow to air-dry. Store in a covered, high-level disinfected container for up to one week.

**Storage**
Items should be used or stored properly immediately after processing so they do not become contaminated. How they should be stored depends on whether they have been sterilized or high-level disinfected, which method was used and whether the items are wrapped or unwrapped. Basic directions for storage are given in the instructions for each of the processes described above. No matter which method is used, do not store instruments or other items in solutions; always store them dry, as microorganisms can live and multiply in both disinfectant and antiseptic solutions.

When retrieving a sterile or high-level disinfected item from the container in which it is being stored, use only a sterile or high-level disinfected forceps to avoid contaminating it and the remaining items. It is best to store only a small number of items in each container to minimize the risk of contamination.

**Remember:** If an item comes in contact with persons, surfaces, dust particles, insects or anything that is not sterile or high-level disinfected, the item must be considered contaminated. Because of the high risk of contamination, unwrapped sterile or high-level disinfected items must be used immediately or kept in a covered, sterile or high-level disinfected container for no longer than one week. After that, they should be re-processed.
Figure 4.1-1: Formulas for Preparation of Dilute Chlorine Solution

### Using Liquid Bleach

Chlorine in liquid bleach comes in different concentrations. You can use any concentration to make a 0.5% dilute chlorine solution using the following formula:

\[
\frac{\text{% chlorine in liquid bleach}}{\text{% chlorine desired}} \times 1,000 = \text{Number of grams of powder for each liter of water}
\]

**Example:** To make a 0.5% chlorine solution from 3.5% bleach:

\[
\frac{3.5\% \text{ chlorine bleach}}{0.5\% \text{ chlorine desired}} \times 1,000 = 7 = 1 \text{ part of bleach to 6 parts water}
\]

**Therefore:** Add 1 part bleach to 6 parts water to make a 0.5% chlorine solution.

### Using Bleach Powder (such as calcium hypochlorite 35%)

Using bleach powder, calculate the ratio of bleach to water by using the following formula:

\[
\frac{\text{% chlorine desired}}{\text{% chlorine in bleach powder}} \times \frac{1,000}{1} = \text{Number of grams of powder for each liter of water}
\]

**Example:** To make a 0.5% chlorine solution from calcium hypochlorite powder containing 35% active chlorine:

\[
\frac{0.5\% \text{ chlorine desired}}{35\% \text{ chlorine in bleach powder}} \times 1,000 = 0.0143 \times 1,000 = 14.3 \text{ grams/liter}
\]

**Note:** When using bleach powder, the solution often looks cloudy and the smell is not as strong as it is when liquid bleach is used.
Table 4.1-4: Recommended Dilutions of Bleach

**Note:** In countries where French products are available, the amount of active chlorine is often expressed as degrees chlorum. One degree chlorum (°chlorum) contains about 0.3% active chlorine. Eau de Javel, for example, contains 15°chlorum. This is equal to about 5% active chlorine.

<table>
<thead>
<tr>
<th>Brand of Bleach (country)</th>
<th>Percent Available Chlorine</th>
<th>Dilution Necessary to Achieve 0.5% Concentration (for decontamination, blood spills, soiled equipment)</th>
<th>Dilution Necessary to Achieve 0.1% Concentration (for high-level disinfection of cannulae)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JIK (Africa), Robin bleach (Nepal), Ajax (Jamaica)</td>
<td>3.5%</td>
<td>1 part bleach to 6 parts water, or 160 ml bleach to 1 liter water</td>
<td>1 part bleach to 34 parts water, or 30 ml bleach to 1 liter water</td>
</tr>
<tr>
<td>Household bleach, Clorox (USA, Canada), ACE (Turkey), Jif, Red &amp; White (Haiti), Odex (Jordan), Eau de Javel (France, Vietnam) (15°chlorum), Clorox (Peru)</td>
<td>5%</td>
<td>1 part bleach to 9 parts water, or 110 ml bleach to 1 liter water</td>
<td>1 part bleach to 49 parts water, or 20 ml bleach to 1 liter water</td>
</tr>
<tr>
<td>Blanqueador, cloro (Mexico), Hypex (Jordan)</td>
<td>6%</td>
<td>1 part bleach to 11 parts water, or 90 ml bleach to 1 liter water</td>
<td>1 part bleach to 59 parts water, or 17 ml bleach to 1 liter water</td>
</tr>
<tr>
<td>Lavandina (Bolivia)</td>
<td>8%</td>
<td>1 part bleach to 15 parts water, or 70 ml bleach to 1 liter water</td>
<td>1 part bleach to 79 parts water, or 13 ml bleach to 1 liter water</td>
</tr>
<tr>
<td>Chloros (UK), Liguria (Peru)</td>
<td>10%</td>
<td>1 part bleach to 19 parts water, or 50 ml bleach to 1 liter water</td>
<td>1 part bleach to 99 parts water, or 10 ml bleach to 1 liter water</td>
</tr>
<tr>
<td>Extrait de Javel (France) (48°chlorum), Chloros (UK)</td>
<td>15%</td>
<td>1 part bleach to 29 parts water, or 30 ml bleach to 1 liter water</td>
<td>1 part bleach to 149 parts water, or 7 ml bleach to 1 liter water</td>
</tr>
</tbody>
</table>

Table 4.1-5: Preparing Dilute Chlorine Solutions from Dry Powders: Recommended Dilutions of Chlorine-Releasing Compounds

**Note:** Dilution is necessary when using a pre-made bleach solution, because bleach sold by commercial brands is more than 0.5% concentrated. The following chart shows how to obtain a 0.1% and a 0.5% solution from pre-made solutions.

<table>
<thead>
<tr>
<th>Available Chlorine Required</th>
<th>0.5% Solution (e.g., for blood spills, soiled equipment, dilution made with contaminated water)</th>
<th>0.1% Solution&lt;sup&gt;b&lt;/sup&gt; (e.g., for cleaning medical equipment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium hypochlorite (70% available chlorine)</td>
<td>7.1 g/liter&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.4 g/liter</td>
</tr>
<tr>
<td>Calcium hypochlorite (35% available chlorine)</td>
<td>14.2 g/liter</td>
<td>2.8 g/liter</td>
</tr>
<tr>
<td>NaDCC&lt;sup&gt;c&lt;/sup&gt; (60% available chlorine)</td>
<td>8.3 g/liter</td>
<td>1.5 g/liter</td>
</tr>
<tr>
<td>Chloramine tablets&lt;sup&gt;d&lt;/sup&gt; (1 g of available chlorine per tablet))</td>
<td>20 g/liter (20 tablets/liter)&lt;sup&gt;d&lt;/sup&gt;</td>
<td>4 g/liter (4 tablets/liter)&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
<tr>
<td>NaDCC-based tablets (1.5 g of available chlorine per tablet)</td>
<td>4 tablets/liter</td>
<td>1 tablet/liter</td>
</tr>
</tbody>
</table>

<sup>a</sup> For dry powders, read x grams per liter (example: Calcium hypochlorite—7.1 grams mixed with 1 liter water).

<sup>b</sup> Use boiled eater when preparing a 0.1% chlorine solution for HLD because tap water contains microscopic organic matter that inactivates chlorine.

<sup>c</sup> Sodium Dichloroisocyanurate.

<sup>d</sup> Chloramine releases chlorine at a slower rate than does hypochlorite. Before using the solution, be sure the tablet is completely dissolved.

## Table 4.1-6: High-Level Disinfection of Instruments

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Disinfecting Agent</th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Solution Strength</th>
<th>Minimum Time Required for Disinfection</th>
<th>Steps</th>
<th>Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannulae</td>
<td>Boiling Water</td>
<td>Easily Available; will provide HLD up to 5,500 meters (18,000 ft)</td>
<td>N/A</td>
<td>20 minutes at rolling boil</td>
<td>Fill large (at least 25 cm/10” diameter) pot 3/4 full with clean water; deposit instruments; cover pot; bring to boil again; boil for 20 minutes; remove items gently with HLD forceps; air-dry on a HLD tray or in a HLD container.</td>
<td>Grasp cannulae gently when removing from water. Grasping hot cannulae with forceps may flatten the cannulae. Do not leave cannulae in previously boiling water.</td>
<td></td>
</tr>
<tr>
<td>Metal Instruments and Cannulae</td>
<td>Glutaraldehyde (2–4%)</td>
<td>Not easily inactivated by organic materials</td>
<td>Skin, eye respiratory irritant</td>
<td>Use full strength, never dilute; follow manufacturer’s instructions for mixing</td>
<td>20 minutes</td>
<td>Submerge items completely, making sure solution fills cannula interior; soak; remove with HLD forceps; rinse with boiled water; air-dry on a HLD tray or in a HLD container.</td>
<td>Discard solution (7–28 days) after mixing or sooner if cloudy. (Follow manufacturer’s instructions.)</td>
</tr>
<tr>
<td>Instruments, Cannulae and Syringes</td>
<td>Chlorine (0.1%)</td>
<td>Fast-acting, very effective against HBV and HIV</td>
<td>Corrosive to metal</td>
<td>Dilute to 0.1% for clean equipment using boiled water; 0.5% if tap water used</td>
<td>20 minutes</td>
<td>Submerge items completely in a non-metal container, making sure solution fills cannula interior; soak; remove with HLD forceps; rinse with boiled water; air-dry on a HLD tray or in a HLD container.</td>
<td>Change solution daily or sooner if cloudy.</td>
</tr>
<tr>
<td>Equipment</td>
<td>Disinfecting Agent</td>
<td>Advantages</td>
<td>Disadvantages</td>
<td>Solution Strength</td>
<td>Minimum Time Required for Disinfection</td>
<td>Steps</td>
<td>Precautions</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------</td>
<td>------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------</td>
<td>--------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Cannulae</td>
<td>Hydrogen peroxide (6%)</td>
<td>Not easily inactivated by organic materials</td>
<td>Corrosive to copper, zinc, aluminum and brass; inactivated by prolonged exposure to heat (over 30°C) or light</td>
<td>Mix 1 part 30% hydrogen peroxide with 4 parts boiling water to make 6% solution</td>
<td>30 minutes</td>
<td>Submerge items completely in a non-metal container, making sure solution fills cannula interior; soak; remove with HLD forceps; rinse with boiled water; air-dry on a HLD tray or in a HLD container.</td>
<td>Store hydrogen peroxide in opaque container away from light and heat. Change solution daily or sooner if cloudy.</td>
</tr>
<tr>
<td>Group</td>
<td>Activity against Bacteria</td>
<td>Most Gram-positive</td>
<td>Gram-negative</td>
<td>TB</td>
<td>Viruses</td>
<td>Fungi</td>
<td>Endospores</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------</td>
<td>--------------------</td>
<td>--------------</td>
<td>----</td>
<td>---------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>Alcohol</td>
<td>Very Good</td>
<td>Good</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Chlorhexidine</td>
<td>Very Good</td>
<td>Good</td>
<td>Poor</td>
<td>Poor</td>
<td>Poor</td>
<td>Poor</td>
</tr>
<tr>
<td></td>
<td>Hexachlorophene</td>
<td>Very Good</td>
<td>Good</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Iodine Preparations</td>
<td>Very Good</td>
<td>Good</td>
<td>None</td>
<td>Poor</td>
<td>Poor</td>
<td>Poor</td>
</tr>
<tr>
<td></td>
<td>Lodophors</td>
<td>Very Good</td>
<td>Good</td>
<td>None</td>
<td>Poor</td>
<td>Poor</td>
<td>Poor</td>
</tr>
</tbody>
</table>

Table 4.1-7: Antiseptic Effectiveness


