



# Prevention of Postpartum Hemorrhage: Implementing Active Management of the Third Stage of Labor (AMTSL)

## Facilitator's Guide



**USAID**  
FROM THE AMERICAN PEOPLE



**POPPHI**

Prevention of Postpartum Hemorrhage Initiative

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Facilitator's Guide

2007

## **Prevention of Postpartum Hemorrhage Initiative (POPPHI)**

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# Table of contents

Introduction .....	1
About this training .....	1
Training objectives .....	2
Materials .....	2
Responsibilities of a facilitator .....	3
Assessments of participants .....	4
Clinical training program for AMTSL .....	5
Meetings with participants .....	7
Managing the participant’s clinical experience .....	8
Conducting classroom sessions.....	9
Training schedule .....	11
Core Topic 1: Review of third stage of labor and evidence for use of AMTSL .....	13
Summary .....	13
Objectives .....	13
Materials/resources needed for the session .....	13
Lesson Plan .....	14
Core Topic 2: Causes and prevention of PPH.....	23
Summary .....	23
Objectives .....	23
Materials/resources needed for the session .....	23
Lesson Plan .....	24
Core Topic 3: Uterotonic Drugs .....	35
Summary .....	35
Objectives .....	35
Materials/resources needed for the session .....	35
Facilitator’s notes .....	35
Lesson Plan .....	36
Core Topic 4: Steps in active management of the third stage of labor .....	45
Summary .....	45
Objectives .....	45
Materials/resources needed for the session .....	45
Facilitator’s notes .....	45
Lesson Plan .....	46
Learning the steps in AMTSL: Instructions for using checklists.....	59
Practice Checklist for Active Management of Third Stage of Labor .....	61
Evaluation Checklist for Active Management of Third Stage of Labor .....	67
Job Aid: Active Management of the Third Stage of Labor (AMTSL) .....	71
Additional Topic 1: Infection Prevention Review .....	73
Summary .....	73
Objectives .....	73
Materials/resources needed for the session .....	73
Facilitator’s Note .....	73
Lesson Plan .....	74

Infection Prevention (IP) knowledge interactive game .....	84
Additional Topic 2: Birth Preparedness and Complication Readiness.....	93
Summary .....	93
Objectives .....	93
Materials/resources needed for the session .....	93
Facilitator’s Note .....	93
Lesson Plan .....	94
Additional Topic 3: Management of selected complications during the third stage of labor .....	101
Summary .....	101
Objectives .....	101
Materials/resources needed for the session .....	101
Facilitator’s Note .....	101
Lesson Plan .....	102
Case study: Vaginal bleeding after childbirth—Answer Key.....	122
Clinical Simulation: Management of Vaginal Bleeding After Childbirth.....	124
Checklists for Facilitators .....	127
Checklist for Classroom Presentation Skills .....	127
Checklist for Clinical Coaching Skills.....	128
Checklist for Clinical Demonstration Skills.....	130
Administrative Documents .....	131
Registration Form .....	131
Pre-Course Questionnaire: AMTSL .....	135
KEY Pre-Course Questionnaire: AMTSL .....	137
Mid-Course Questionnaire: AMTSL .....	139
KEY Mid-Course Questionnaire: AMTSL.....	143
Alternate Mid-Course Questionnaire: AMTSL .....	147
KEY Alternate Mid-Course Questionnaire: AMTSL .....	151
Facilitator’s Tools .....	155
Training report form .....	155
Documents, Forms, and Equipment Needed for 3-Day AMTSL Training .....	157
Facilitator responsibility list.....	159
Slide References .....	162
Text References.....	162

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## About POPPHI

The Prevention of Postpartum Hemorrhage Initiative (POPPHI) is a USAID-funded, five-year project focusing on the reduction of postpartum hemorrhage, the single most important cause of maternal deaths worldwide. The POPPHI project is led by PATH and includes four partners: RTI International, EngenderHealth, the International Federation of Gynaecology and Obstetrics (FIGO), and the International Confederation of Midwives (ICM).

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## Acronyms

AMTSL	active management of the third stage of labor
BPP	birth-preparedness plan
CRP	complication-readiness plan
FIGO	International Federation of Gynaecology and Obstetrics
HLD	high-level disinfection
ICM	International Confederation of Midwives
IM	Intramuscular
IU	international units
MTCT	Mother-to-child transmission of HIV/AIDS
PMTSL	physiologic management of the third stage of labor
POPHI	Prevention of Postpartum Hemorrhage Initiative
PPH	postpartum hemorrhage
PPPH	prevention of postpartum hemorrhage
USAID	United States Agency for International Development
WHO	World Health Organization





## Introduction

Each year, hundreds of thousands of women and babies die or become disabled due to complications of pregnancy and childbirth; half of these maternal deaths occur within 24 hours of childbirth.<sup>1</sup> Postpartum hemorrhage (PPH) is the leading direct cause of maternal death in developing countries and most often results from problems during and immediately after the third stage of labor.<sup>2</sup> PPH is an unpredictable and rapid cause of maternal death worldwide, with two-thirds of women with PPH having no identifiable risk factors. Seventy to ninety percent of immediate PPH is attributed to uterine atony (failure of the uterus to properly contract after birth).<sup>3,4</sup>

Fortunately, research shows that using simple, low-cost interventions can help avoid most of these tragic outcomes. Current evidence indicates active management of the third stage of labor (AMTSL) (administration of uterotonic drugs, controlled cord traction, and fundal massage after delivery of the placenta) can reduce the incidence of postpartum hemorrhage by up to 60 percent in situations where:

- National guidelines support the use of AMTSL.
- Health workers receive training in using AMTSL and administering uterotonic drugs.
- Injection safety is ensured.
- Necessary resources (uterotonic drugs and cold chain for storage of uterotonic drugs; equipment, supplies, and consumables for infection prevention and injection safety) are available.<sup>5</sup>

Ongoing research in various settings continues to identify the best approaches for preventing and managing postpartum bleeding and its complications. By developing national guidelines, training skilled birth attendants, improving work environments of skilled providers, and supporting the development of improved access to care, more women will have access to this lifesaving intervention.

## About this training

POPPHI developed this guide and the accompanying training materials—about the prevention of PPH and implementing AMTSL—for skilled birth attendants who provide services to women during labor, childbirth, and the immediate postpartum period. This course offers participants the knowledge and skills to provide the crucial care needed to prevent PPH, improve clinical services, and train other providers. This training will equip participants to:

- Provide safe, respectful, and friendly care to women, newborns, and their families, thereby encouraging mothers and families to utilize the health care system with confidence.
- Follow an evidence-based protocol for safe care during AMTSL and during the immediate postpartum period, including clear guidelines on when to refer mothers with complications, ensuring timely action is taken.

- Provide greater protection from infection for their clients and themselves.
- Store uterotonic drugs to maintain their potency.

## Training objectives

This three-day clinical training provides the information needed to perform AMTSL and help prevent PPH and focuses on the following core topics:

- Review of the third stage of labor and evidence for use of AMTSL.
- Causes and prevention of postpartum hemorrhage.
- Uterotonic drugs.
- AMTSL.

Additional topics that some countries may include during the training include:

- Infection prevention.
- Birth preparedness and complication readiness.
- Managing complications during the third stage of labor.

Participants are encouraged to apply their knowledge and skills to improve clinical services and train other providers. Ultimately, this training will help improve the quality of care for women—mothers, wives, and vital members of the community—and help them stay healthy.

## Materials

The **Reference Manual** contains the theoretical content for the training course. It has three sections:

- **Core topics:** The theoretical base for preventing postpartum hemorrhage is included in the core topics: (1) review of the third stage of labor and evidence for use of AMTSL, (2) causes and prevention of PPH, (3) uterotonic drugs, and (4) steps in AMTSL. All prevention of postpartum hemorrhage (PPPH) training programs should include the core topics and training for competency in AMTSL.
- **Additional topics:** Theoretical content is included in additional topics that countries can include in training programs based on their particular needs: (1) infection prevention, (2) birth preparedness and complication readiness, and (3) management of selected complications during the third stage of labor.
- **Appendices:** Appendices provide additional information for providers and decision-makers.

The **Facilitator's Guide** assists facilitators working in PPPH initiatives. The purpose of this guide is to help facilitators do their job when conducting PPPH training programs that include training for competency in AMTSL. The guide has the following components:

- General information to assist the facilitator in conducting a training session in AMTSL.
- An agenda for the training program.
- Lesson plans for each session to be presented.
- Questionnaire and learning activity answers.
- Model forms to fill in for the training report.



**Pre- and mid-course questionnaire** forms are in the **Facilitator's Guide**. Print enough copies of these forms for each participant before the training program begins.

The **Participant's Notebook** assists participants in PPPH training programs. The purpose of the notebook is to assist participants to become more knowledgeable about PPPH and become competent in performing AMTSL. The notebook has the following components:

- General information to assist the participant through the PPPH training program.
- Training program agenda.
- Learning activities for each topic.
- Answers for learning activities.
- Practice checklist for AMTSL.
- Evaluation checklist for AMTSL.
- Training evaluation form.

If possible, each participant should receive a copy of the **Participant's Notebook** and **Reference Manual** on the first day of training activities. Each facilitator needs a copy of the **Facilitator's Guide**.

## Responsibilities of a facilitator

Carefully selected facilitators are essential for a successful training program. An ideal facilitator should be a practicing nurse, midwife, or physician competent and confident in performing a clean and safe delivery, including AMTSL, who is also:

- Trained in competency-based training and participatory learning methods.
- Trained in conducting clinical training programs.
- Able to use learning principles for an effective clinical training program.
- Able to perform AMTSL according to the checklist.
- Competent in the practice of AMTSL.

Facilitators should meet before training activities begin to discuss and assign the following administrative responsibilities:

1. Arrange participant program schedule (meetings, demonstrations, return demonstrations, on-call) and make team assignments.
2. Photocopy pre- and mid-course questionnaire forms (found at the back of the **Facilitator's Guide**).
3. Help establish a healthy learning environment in the classroom and clinical settings.
4. Coordinate facilitation of teaching sessions, demonstrations, return demonstrations, and clinical practice with other facilitators.
5. Teach, observe, and evaluate participants in the clinical areas. If the facilitator is not in the clinical area, assign other staff to do this.
6. Provide information during classroom sessions according to content found in the **Reference Manual**.
7. Guide and support one participant at a time.

## Assessments of participants

Facilitators evaluate the participants' knowledge and skills during the training program using a checklist to evaluate performance of tasks, skills, or activities and pre- and mid-course questionnaires to evaluate knowledge. Each topic has a set of learning activities, enabling the participant to practice applying the presented information.

The facilitator records pre- and mid-course questionnaire scores in the **Participant's Notebook**, dates the participant was found competent in a simulated setting and in the clinical practicum, and final recommendations.

### ***Pre-course questionnaire***

Prior to beginning the training program, participants should complete the pre-course questionnaire.

**Note: To save time, consider administering the pre-course questionnaire the evening before the first day of the training program.**

The objectives of this questionnaire are to:

- Assess what the participant knows about the course topics.
- Identify topics that may need additional emphasis during the course.
- Alert the participant to the content that will be presented in the course.

Facilitators and participants may correct the pre-course questionnaire together using the answers found in the key in the **Facilitator's Guide**.

### ***Mid-course questionnaire***

After completing the session objectives, the facilitator will administer the mid-course questionnaire. The objectives of this questionnaire are similar to the pre-course questionnaire:

- Assess what the participant has learned about the course topics.
- Identify topics that may need additional emphasis during the clinical practicum.
- Identify each participant's individual learning needs.

Facilitators and participants may correct the mid-course questionnaire together using the answers found in the key in the **Facilitator's Guide**.

Participants should be encouraged to review course content for the questions they answered incorrectly and to talk with facilitators if they have questions about any of the answers.

Participants who do not achieve a score of at least 80% on the mid-course questionnaire will have a second chance to take it on the last day of training activities. All participants must achieve a score of at least 80% to receive certification.

### ***Assessment in a simulated setting (i.e., on anatomic models)***

After completing the mid-course questionnaire and before going to the clinical area, the facilitator will use the evaluation checklist to evaluate each participant on an anatomic model. When the facilitator determines a participant can competently perform the newly acquired skills on a model, the participant can practice the skill in the clinical area to gain competency and proficiency in the skills acquired.



### ***Clinical skills at the training site***

After demonstrating their skills in a simulated situation (i.e., on models), participants will spend time in the clinical area to observe and—when possible—apply the newly gained knowledge and skills in a clinical setting. Ward staff and clinical preceptors are vital to a high-quality learning environment. Clinical preceptors will supervise the training, but ward staff will be guiding, coaching, and mentoring participants through the training. Ward staff must practice the skills according to standards agreed upon in the training program to ensure consistency and improve the chances that the participant will be competent in the newly acquired skills.

Participants and facilitators keep track of progress in the clinical area by using the evaluation checklist found in the **Participant's Notebook**.

## **Clinical training program for AMTSL**

### **Assignment of a facilitator to participants**

Each participant will be assigned a facilitator who will take primary responsibility for that participant throughout the training program. It is the duty of each facilitator to follow the participant's progress closely and meet regularly to discuss progress and difficulties. This includes acting as a role model and mentor for the participants and advocating on their behalf within the hospital system. Other hospital staff (doctor, nurse, and midwife) will also be available to work with the participant in the clinical area.

### **Working in teams**

During training participants are asked to work together in teams to help each other during practice in the classroom and when working with a woman in the clinical area. Each team may have two to four participants. During classroom practice, each team member must take a turn to carry out each responsibility noted in the chart below. Therefore, if there are four team members, the practice must be done four times so each team member has the chance to practice attending a delivery. This helps participants participate more actively in **all** experiences and learn more from each experience. The responsibilities of each team member include the following:

#### **Responsibilities of Team Members**

<b>Team Member</b>	<b>Responsibility</b>
<b>1</b>	In classroom, role-plays as the woman in labor.
<b>2</b>	Attends the birth.
<b>3</b>	Supports the person who is attending the birth.
<b>4</b>	Supports the woman in labor.
<b>5</b>	Observes the entire process using the skills checklist for AMTSL.
<b>6</b>	Observes the entire process, noting the timing of the following events: <ul style="list-style-type: none"> <li>• Baby born.</li> <li>• Oxytocin given.</li> <li>• Cord clamped and cut.</li> <li>• Placenta delivered.</li> <li>• Uterus massaged.</li> </ul>

After each member has attended a birth either in the classroom, in a simulated situation (i.e., using anatomic models), or in the clinical area, give feedback immediately using the checklist as a guide:

- Always start feedback with one or two positive comments on what was done correctly.
- The team member who is attending the birth gives feedback on his/her performance.
- Observers give feedback.
- Then, if a facilitator is present, the facilitator gives feedback on any missed points.



## Meetings with participants

### First meeting: orientation and schedule

The initial meeting will take place on the first day of training. During this meeting, the facilitator will:

- Distribute the training materials
- Review the different sections of the Participant's Notebook
- Review the agenda and topics to be covered
- Describe how participants' knowledge and skills will be evaluated
- Assign participants to teams, explain the "team system," and designate a facilitator for each team/ participant.

### Pre-clinical meeting

Before beginning clinical practice, the facilitator meets individually with each participant. During this meeting, the facilitator will:

- Ensure that each participant competently performs all the skills on models.
  - Each participant must be found competent in a simulated situation (i.e., on anatomic models) before beginning clinical practice. When the participant is found competent on the model, the facilitator will mark the date and sign the participant's evaluation form (found in the **Participant's Notebook**).
  - If the participant has not yet been found competent in a simulated situation (i.e., on anatomic models) at the time of the pre-clinical meeting, the facilitator will work with the participant and perform another assessment in a simulated situation.
- Plan the participant's clinical schedule. The participant and facilitator will discuss the participant's clinical schedule for the remainder of the training program. The facilitator will encourage the participant to continue practicing on models, if needed; read all of the material presented in the **Reference Manual**; and complete learning activities in the **Participant's Notebook**.
- Review the participant's checklists to verify that the participant understands how and why the checklist is used and to identify areas the participant needs to focus on.
- **Conduct a tour** of the clinical site to become familiar with the facilities and accommodations, and to meet the hospital staff.

### Final meeting

The last meeting between the facilitator and participant will take place after completing the clinical experience. The purpose of this meeting is to review the participant's progress, verify that the participant is competent on models and in the clinical area, make a plan for applying the new skills and knowledge in the workplace, and make a plan for follow-up after the training program is completed.

The facilitator and participant together develop final recommendations at the end of the training program and record them in the **Participant's Notebook**.

## Managing the participant's clinical experience

To make the best use of the limited number of clinical experiences, participants must always be present on the unit when there are women in labor. Since there is often a small number of clients, the following structure is useful in maximizing learning from each experience.

1. Meet with staff at the clinical site before training begins to enlist their support and discuss how facilitators and site staff can work together during training activities.
2. Complete classroom sessions, demonstrations, and return demonstrations with models prior to beginning the clinical experience. Evaluate each participant's competence in a simulation situation (i.e., on anatomic models) before clinical practical experience begins.
3. Conduct a meeting with participants at the clinical site at the beginning of each clinical block. During this meeting discuss how to proceed with each experience, review skills as necessary, answer any questions the participants may have, and designate which participants (teams) will get the first clinical experience.
4. Use the "team system." Teams of two will work with one woman at a time. One of the participants performs AMTSL while the other assists and provides reminders about missed steps. Each of these activities provides valuable learning experiences.
5. When possible, only two participants should be present in the labor room. If there is a limited number of births at the facility, more than two participants may observe a birth if the woman gives permission.
6. Review the participant's previous performance. Review any steps that caused trouble and set goals for this clinical case.
7. Ask for the woman's permission for participants to perform AMTSL. Explain the role of the facilitator, the participant performing AMTSL, and the participant serving as the assistant. Make sure the woman understands that she has the right to refuse a participant's presence at her birth and that a refusal will not negatively affect her care.
8. Review the participant's performance immediately after practicing AMTSL. First, ask for comments on the participant's performance, then provide constructive feedback and set goals for the next performance.
9. Conduct a post-clinical meeting with all participants in the clinical area to debrief on clinical cases, answer any questions, and prepare for the next clinical experience.
10. Use the exercises included in the **Participant's Notebook** to facilitate assimilation of concepts taught in the classroom. Participants may complete these exercises while in the clinical area when there are no clients. Participants may correct their exercises themselves, as a group, or with the facilitator by referring to answers found in the **Participant's Notebook**.
11. When not in the clinical area, participants may continue practicing on the anatomic models.



## Conducting classroom sessions

### Using the *Facilitator's Guide*

#### ***Before the training begins:***

- Read the **Reference Manual** thoroughly to be sure that it is in agreement with current policies and practice guidelines in your country. The manual is based on globally accepted, evidence-based information that countries should strive to adopt in their guidelines. However, if this has not yet occurred for your setting, revisions may need to be made.
- If only the core topics are included, this course can be completed in three days. Adjust the time needed according to your training situation. For example, you may need less time if fewer participants attend or if this training is part of an on-the-job learning program.
- Review the Facilitator's Tools (in the Facilitator's Guide) for other preparation details.
- If any participants already have AMTSL experience, consider evaluating their skills before the first day of training.
- Make a copy for each participant of the:
  - **Participant's Notebook.**
  - Pre- and mid-course questionnaire forms (in the **Facilitator's Guide**).
  - Registration forms (in the **Facilitator's Guide**).
  - Training evaluation forms (in the **Participant's Notebook** and the **Facilitator's Guide**).

#### ***Before each session:***

- Read the content of each session thoroughly.
- Review any learning activities (case studies, role-plays, etc.) and skill learning checklists for the session.
- Review the materials and resources needed for the session and make sure they are available.
- Review the suggested lesson plan and learning objectives for the session. The lesson plan builds on the knowledge from the suggested readings in the **Reference Manual**. Use those parts of the lesson plan that are relevant to your participants' learning needs. This will depend on the experience, skill, and knowledge level of the participants and how much time is available.
- Plan how much time to devote to each learning activity; lesson plans are included for your guidance.

### **Lesson plans**

Preparation of what you will teach and how you will teach is just as important as the actual teaching. Even though it takes time to do the preparation, it will help you to feel not just **competent**, but also **confident**. Using a lesson plan can help to organize all of the details of teaching. Reviewing a lesson plan will also help you discover what you know and what you may have forgotten. It is your responsibility as a facilitator to ensure your knowledge and skills are up to date. Review both your **knowledge** and **skill** by teaching yourself again, or find someone who can help you.

There is a lesson plan for each of the sessions. The lesson plan is simply a guide and should be adapted based on the needs or experience of the participants. For example, some groups may need a more thorough infection prevention review. Make these decisions in advance, so an appropriate training plan and schedule can be developed.

### **Lesson plan format**

#### **First page of the lesson plan**

- **Topic**
- **Time**
- **Summary**
- **Session or topic objectives**
- **Materials/resources needed for the session**

#### **Lesson plan**

- **Time:** How long each step will last.
- **Objectives, activities, and learning methods**
- **Flipchart / Overhead / PowerPoint slide:** Provides an example of a flipchart, overhead, or PowerPoint slide the facilitator can use to guide the classroom session. The facilitator determines the medium used (flipchart, overhead, or LCD) based on locally available materials.
- **Notes to the facilitator:** Everything needed to teach a particular topic or session. This may include technical resources (such as texts), handouts, or basic instructions on facilitating the learning session.

## Training schedule

### Sample schedule for core curriculum\*

Day 0	Day 1	Day 2	Day 3		
<p><b>Participants arrive</b></p> <p><b>Pre-course skill assessment</b> (Facilitators will assess skill level of participants with AMTSL experience.)</p> <p><b>Observation of AMTSL</b> in the labor ward. Participants may observe AMTSL using the checklist but should not practice AMTSL.</p>	<p><b>Opening</b></p> <ul style="list-style-type: none"> <li>Welcome</li> <li>Participant introductions</li> <li>Participant expectations</li> <li>Workshop norms</li> </ul> <p><b>Overview of the course</b></p> <ul style="list-style-type: none"> <li>Goals, objectives, schedule</li> <li>Approach to training</li> <li>Review of course materials</li> </ul> <p><i>Pre-course questionnaire</i></p>	<p><b>Mid-course questionnaire</b></p> <p><b>Pre-clinical meeting</b> (assessing competency on models before beginning clinical practice)</p>	<p><b>AMTSL in the clinical area</b></p> <p>When clients are not present, participants may work on learning activities in the clinical area.</p>		
	<b>Tea Break</b>			<b>Continued</b>	
	<p><b>Session 1:</b> Review of the third stage of labor and evidence for use of AMTSL.</p> <p><b>Session 2:</b> PPH causes and prevention.</p>				
	<b>Lunch</b>				
	<p><b>Session 3:</b> Uterotonic drugs</p> <p><b>Session 4:</b> AMTSL</p>	<b>AMTSL in the clinical area</b>		When clients are not present, participants may work on learning activities in the clinical area.	<p><b>Final meeting</b></p> <p><b>Retake mid-course questionnaire</b> (if needed)</p>
	<b>Tea Break</b>				
<p>Session 4: AMTSL (continued)</p> <p>Review frequently asked questions (FAQs)</p>			<p><b>Workshop evaluation</b></p> <p><b>Closing session</b></p>		
<p><b>Homework</b></p>	<p>Read core topics 1-4.</p> <p>Work on learning activities for core topics 1-4.</p> <p>Prepare for mid-course questionnaire.</p>	<p>Work on learning activities for core topics.</p>			

\* If additional topics are included in the training program, the agenda may need to be revised accordingly.





# Core Topic 1: Review of third stage of labor and evidence for use of AMTSL

60 min.

## Summary

In this section, you will:

- Review the structure and function of the uterus during the third stage of labor.
- Compare physiologic management of the third stage of labor (PMTSL) and AMTSL.
- Review evidence that supports the practice of AMTSL.
- Explain why it is important to include AMTSL in your practice.

## Objectives

By the end of this topic, participants will be able to:

- Describe the anatomy of the uterus.
- Explain how the structure of the uterus helps stop bleeding.
- Define AMTSL.
- Define PMTSL.
- Compare AMTSL and PMTSL.
- Discuss evidence to support AMTSL.
- Explain why AMTSL can save lives.

## Materials/resources needed for the session

- Anatomical posters or models can help participants with this topic. Often pre-service programs in medicine, nursing, or midwifery are willing to lend these items for training.
- National statistics on maternal mortality rates and causes.
- Reference Manual, Participant's Notebook, and Facilitator's Guide.
- Flipchart, flipchart stand, markers, and flipchart tape.

## Lesson Plan

**Review of third stage of labor and evidence for use of active management of the third stage of labor (AMTSL)**  
**Name of presenter**

*Prevention of Postpartum Hemorrhage Initiative (POPHI) Project*  
PATH

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 **POPHI**  
Prevention of Postpartum Hemorrhage Initiative

### Flipchart / Overhead / PowerPoint slide 1

**Time:** 5 min.

#### **Activities:**

- Review objectives of the session.
- Present an overview of the session.

#### **Notes to the facilitator:**

- Introduce the session by presenting the objectives: read the objectives, briefly summarize, or ask a participant to read them aloud.

**Objectives** CT1-1

By the end of this topic, participants will be able to:

- Describe the anatomy of the uterus.
- Explain how the structure of the uterus helps stop bleeding.
- Define active management of the third stage of labor (AMTSL).
- Define physiologic management of the third stage of labor (PMTSL).
- Compare AMTSL and PMTSL.
- Discuss evidence to support AMTSL.
- Explain why AMTSL can save lives.



## Flipcharts / Overheads / PowerPoint slides 2 and 3

**Time:** 10 min.

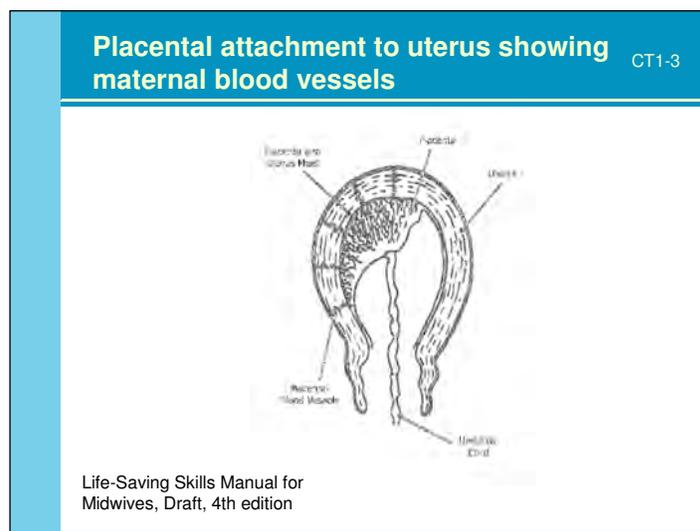
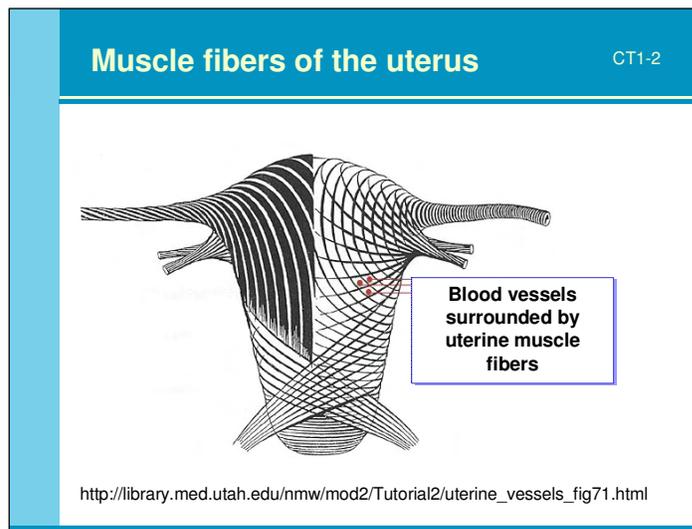
**Activity:** Interactive presentation

### Objectives:

- Describe the anatomy of the uterus.
- Describe the structure and function of the uterus in the immediate postpartum period.

### Notes to the facilitator:

- Have one participant read the paragraph on significance of the third stage of labor in the **Reference Manual**.
- Show participants the diagram of how uterine muscle fibers are arranged.
- Emphasize how the “cross-hatch” pattern surrounds maternal blood vessels.
- Ask participants: What causes contractions?
- Review definitions of contraction and retraction.
- Explain what happens as the uterus contracts and retracts.



#### Flipchart / Overhead / PowerPoint slide 4

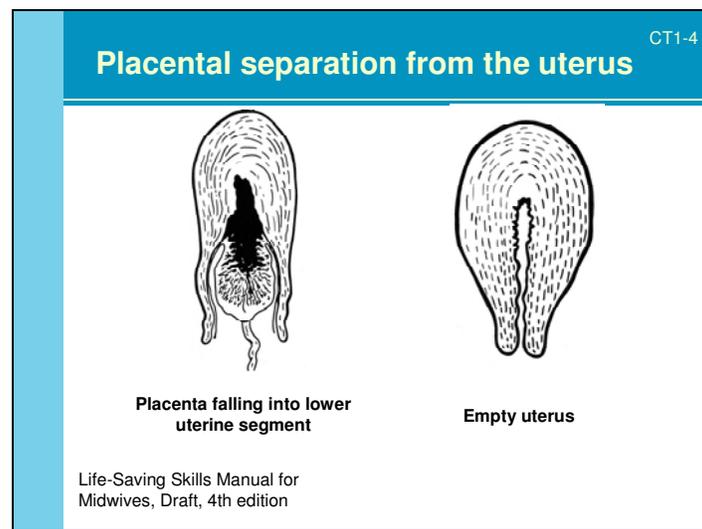
**Time: 5 min.**

**Activity:** Interactive presentation

**Objective:** Explain how the structure of the uterus helps to stop bleeding.

**Notes to the facilitator:**

- Using the diagram of the placenta, show the attachment to the uterine wall.
- Describe how the uterine muscle fibers constrict the blood vessels where the placenta was attached. This helps control bleeding at the placental site.
- Explain how, after separation, the placental site is rapidly covered by a fibrin net and clot formation in the torn vessels is strengthened, leading to decreased bleeding from the site.
- The uterus continues to contract after placental separation, forcing the placenta to fall into the lower uterine segment.
- Complete this part of the session by reviewing the fact that 90 percent of placentas are delivered within 15 minutes and that when the third stage of labor lasts longer than 30 minutes, PPH occurs six times more often than it does among women whose third stage lasted less than 30 minutes.





**Flipcharts / Overheads / PowerPoint slides 5 and 6**

**Time: 15 min.**

**Activities:**

- Brainstorming to identify how participants manage the third stage of labor in their workplace.
- Interactive presentation to compare the elements of AMTSL and PMTSL.

**Brainstorming**
CT1-5

How do you manage third stage of labor?

**Notes to the facilitator:**

- Ask participants how they manage third stage of labor.
- Write their responses on the flipchart.

**Notes to the facilitator:**

- Ask participants to refer to Table 1 in their **Reference Manual**, which compares AMTSL and PMTSL.
- Together analyze whether the elements written on the flipchart are part of AMTSL or PMTSL, then write the element in the appropriate column—*AMTSL* or *PMTSL*.
- If certain elements of either AMTSL or PMTSL were not mentioned, complete the list using Table 1.
- Ask for questions before proceeding.

**AMTSL or Physiologic Management (PMTSL)?**
CT1-6

PMTSL	AMTSL

## Flipcharts / Overheads / PowerPoint slides 7 and 8

**Time: 5 min.**

**Activity:** Individual work and group discussion to compare advantages and disadvantages of AMTSL and PMTSL.

**Objective:** Compare AMTSL and PMTSL.

### Notes to the facilitator:

- Give participants 2 to 3 minutes to review the advantages and disadvantages of AMTSL and PMTSL listed in Table 1 in the **Reference Manual**.
- Ask volunteers first to describe advantages and then disadvantages of each type.
- Complete the list if any of the advantages or disadvantages are not mentioned.

Individual Work	CT1-7
<ul style="list-style-type: none"><li>• Task 1: Describe advantages and disadvantages of AMTSL (Table 1 in the <b>Reference Manual</b>).</li><li>• Task 2: Describe advantages and disadvantages of PMTSL (Table 1 in the <b>Reference Manual</b>).</li></ul>	

### Notes to the facilitator:

- End this part of the session by reviewing the three components of AMTSL.

The components of AMTSL are:	CT1-8
<ul style="list-style-type: none"><li>• Administration of a uterotonic agent within one minute after the baby is born (oxytocin is the uterotonic of choice).</li><li>• Controlled cord traction while supporting and stabilizing the uterus by applying countertraction.</li><li>• Uterine massage after delivery of the placenta.</li></ul>	



## Flipcharts / Overheads / PowerPoint slides 9 and 10

**Time: 10 min.**

**Activity:** Interactive presentation to present scientific evidence to support AMTSL.

### Objectives:

- Discuss how active management affects the length of third stage labor.
- Explain why AMTSL can save lives.

Scientific Evidence to Support AMTSL	CT1-9
<p>Controlled trials have consistently shown that AMTSL decreases:</p> <ul style="list-style-type: none"> <li>• Incidence of postpartum hemorrhage.</li> <li>• Length of third stage of labor.</li> <li>• Percentage of third stages of labor lasting longer than 30 minutes.</li> <li>• Need for blood transfusion.</li> <li>• Need for uterotonics to manage postpartum hemorrhage.</li> </ul>	

### Notes to the facilitator:

- Present an illustrated lecture explaining the scientific evidence supporting the practice of AMTSL.
  - Give participants a minute to weigh advantages and disadvantages of each type of management of the third stage of labor and decide which type appears to be more beneficial for the woman.
  - After a minute or less, ask participants who think AMTSL is more beneficial for the woman to stand.
- Ask one or two of the participants standing to explain their reasoning for choosing AMTSL.
  - If any participants are still seated, ask them to explain why they thought PMTSL was more beneficial for the woman. Answer any questions.

### Notes to the facilitator:

- End this part of the session by pointing out that controlled trials comparing AMTSL and PMTSL did not show an increase in obstetric complications related to AMTSL.
- Ask for questions before proceeding.

In trials comparing active and physiologic management:	CT1-10
<ul style="list-style-type: none"> <li>• No uterine inversions were observed.</li> <li>• Trials using oxytocin alone showed reduced rates of manual removal of the placenta.</li> <li>• Concerns regarding an increased risk of cord rupture were not substantiated .</li> </ul>	

## Flipcharts / Overheads / PowerPoint slides 11 and 12

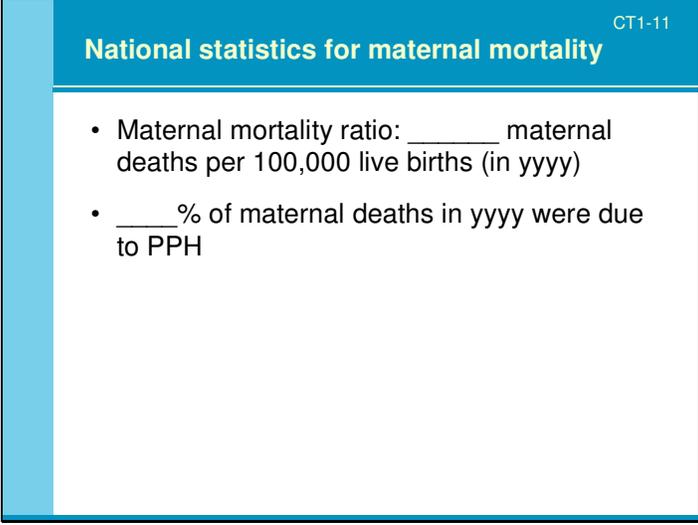
**Time: 5 min.**

**Activity:** Illustrated lecture to present national maternal mortality statistics.

**Objective:** Discuss how PPH affects maternal mortality.

### Notes to the facilitator:

- Present national statistics on maternal mortality.
- Emphasize the percentage of maternal deaths due to PPH.



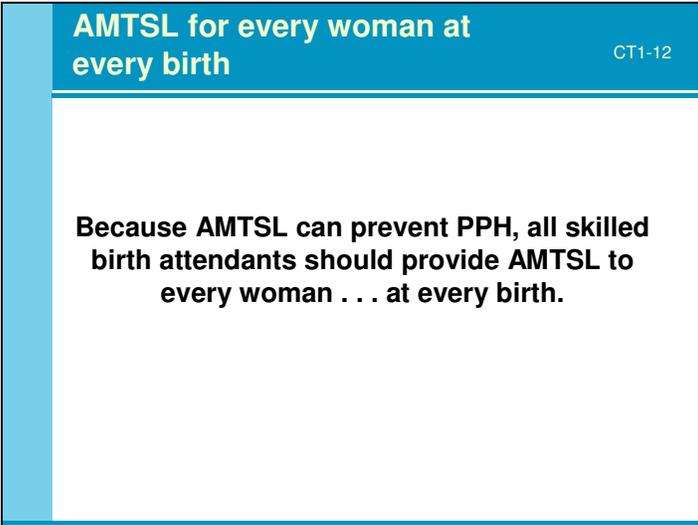
CT1-11

### National statistics for maternal mortality

- Maternal mortality ratio: \_\_\_\_\_ maternal deaths per 100,000 live births (in yyyy)
- \_\_\_\_\_% of maternal deaths in yyyy were due to PPH

### Notes to the facilitator:

- Explain that each birth attendant has a role to play in reducing maternal deaths due to PPH.
- Ask for questions before proceeding.



CT1-12

### AMTSL for every woman at every birth

**Because AMTSL can prevent PPH, all skilled birth attendants should provide AMTSL to every woman . . . at every birth.**



### Flipchart / Overhead / PowerPoint slide 13

**Time:** 5 min.

**Activity:** Summary

**Objective:** Emphasize the major points of the session.

**Notes to the facilitator:**

- Review the most important points of the session by asking the three questions on the flipchart/overhead/PowerPoint slide.
- Involve participants as much as possible in the summary.

Summary of Core Topic 1
CT1-13

- What are the major differences between active and physiologic management of the third stage of labor?
- What are the benefits of performing AMTSL?
- How can health care costs be reduced if all women are offered AMTSL?

### Flipchart / Overhead / PowerPoint slide 14

**Notes to the facilitator:**

Learning activities
CT1-14

- Please complete learning activities found in the **Learner's Guide** for Core Topic 1.
- You may work individually or in groups on the learning activities during breaks, in the evening, or in the clinical area when there are no clients.
- You may correct your answers individually or with another participant or the facilitator.
- See a facilitator if you have questions.

- Encourage participants to work on learning activities found in the **Participant's Notebook** or Core Topic 1.
- Participants may work individually or in groups on the learning activities during breaks, in the evening, or in the clinical area when there are no clients.
- Participants may correct their learning activities by referring to suggested answers found in the **Participant's Notebook** and the **Facilitator's Guide**. Facilitators should make themselves available to work with participants to review answers for learning activities.





## Core Topic 2: Causes and prevention of PPH

**60 min.**

### Summary

Preventing postpartum hemorrhage can reduce the number of women who die or suffer each year because of excessive bleeding related to pregnancy. It is possible to prevent a majority of the postpartum hemorrhages that occur. This brief section gives an overview of postpartum hemorrhage; its causes; and finally, the actions women, families, and health care providers can take to prevent it from occurring.

### Objectives

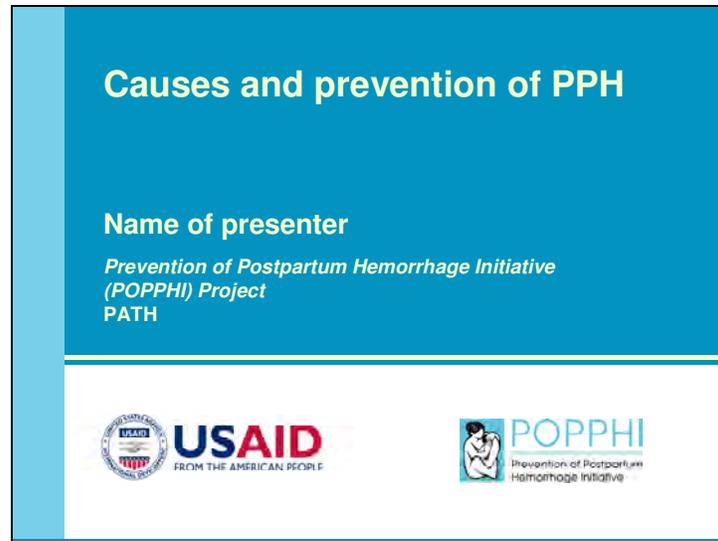
By the end of this topic, participants will be able to:

- Define postpartum hemorrhage (PPH).
- Describe factors that contribute to PPH.
- Describe the causes of PPH.
- Explain ways to prevent PPH.
- Explain ways to ensure timely diagnosis and management of PPH when it occurs.

### Materials/resources needed for the session

- Anatomical posters or models can help participants with this topic. Often pre-service programs in medicine, nursing, or midwifery are willing to lend these items for training.
- **Reference Manual, Participant's Notebook, and Facilitator's Guide.**
- Flipchart, flipchart stand, markers, and flipchart tape.
- 500 mL container and water.
- Large cloth, sarong, sari, or towel.

## Lesson Plan



### Flipchart / Overhead / PowerPoint slide 1

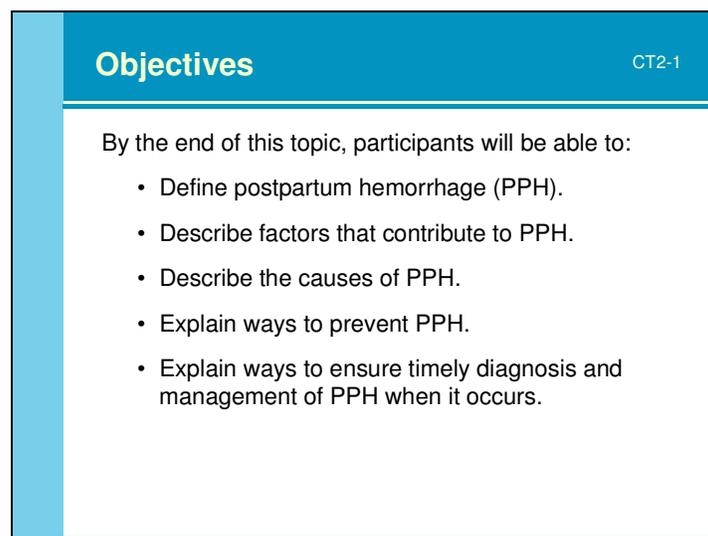
**Time: 5 min.**

#### Activities:

- Review objectives of the session.
- Present an overview of the session.

#### Notes to the facilitator:

- Introduce the session by presenting the objectives: read the objectives, briefly summarize or ask a participant to read them aloud.



**Flipchart / Overhead / PowerPoint slide 2****Time: 5 min.****Activity:** Interactive presentation on the definition of PPH.**Objective:** Define postpartum hemorrhage (PPH).**Notes to the facilitator:**

- Briefly review the magnitude of PPH globally.

<b>Magnitude of the problem</b> <span style="float: right;">CT2-2</span>
<ul style="list-style-type: none"><li>• There are an estimated 14 millions cases of pregnancy-related hemorrhage every year. Of these women:<ul style="list-style-type: none"><li>• At least 150,000 die from the hemorrhage.</li><li>• Those that survive PPH will suffer from severe anemia and other major health problems.</li></ul></li></ul>

**Flipchart / Overhead / PowerPoint slide 3****Time: 5 min.****Activity:** Interactive presentation on the definition of PPH.**Objective:** Define postpartum hemorrhage (PPH).**Notes to the facilitator:**

- Before showing the definition, ask participants to explain how they define PPH.
- Briefly explain the definitions of PPH and severe PPH.

<b>Definition of PPH</b> <span style="float: right;">CT2-3</span>
<ul style="list-style-type: none"><li>• PPH: Vaginal bleeding in excess of 500 mL after childbirth</li><li>• Severe PPH: Vaginal bleeding in excess of 1,000 mL after childbirth</li></ul>

#### Flipchart / Overhead / PowerPoint slide 4

Time: 5 min.

##### Activities:

- Brainstorming to get an idea of how participants estimate blood loss.
- Demonstration showing how 500 mL and then 1,000 mL of liquid looks on a sarong/cloth/sari.

Brainstorming	CT2-4
How do you estimate blood loss after childbirth?	

##### Notes to the facilitator:

- Ask participants to explain how they estimate blood loss after childbirth.
- Discuss the difficulties in estimating blood loss after childbirth.
- Perform a demonstration of PPH by pouring first 500 mL and then 1,000 mL of liquid on a sarong/cloth/sari.

#### Flipchart / Overhead / PowerPoint slide 5

Time: 5 min.

**Activity:** Interactive presentation to discuss how the traditional definitions of PPH may not be appropriate for all women.

##### Notes to the facilitator:

- Discuss why it may be better to define PPH as *“any amount of bleeding that causes a change in the woman’s condition.”*
- Ask participants how this definition may affect treatment protocols.
- Ask for questions before proceeding.

Define PPH as <i>“any amount of bleeding that causes a change in the woman’s condition”</i>	CT2-5
Because:	
<ul style="list-style-type: none"><li>• It is difficult to measure blood loss accurately.</li><li>• Nearly half of women who deliver vaginally often lose at least 500 mL of blood.</li><li>• For severely anemic women, blood loss of even 200 to 250 mL can be fatal.</li></ul>	



### Flipchart / Overhead / PowerPoint slide 6

**Time: 5 min.**

**Activity:** Interactive presentation to discuss why every woman should be offered AMTSL at every birth.

CT2-6

*Two-thirds of women who have PPH  
**have no risk factors.***

*Therefore, all women should be  
considered at risk of PPH and  
hemorrhage prevention must be a part  
of every birth.*

#### Notes to the facilitator:

- Ask providers to think about cases of PPH they have managed and to try to remember if the women had identifiable risk factors before having the PPH.
- Lead an interactive presentation on why identifying risk factors is not an efficient or effective way of preventing PPH (two-thirds of women who have PPH have no risk factors).
- Explain the rationale for considering that all women are at risk of PPH and for promoting interventions to prevent PPH for all women at every birth.

- Ask for questions before proceeding.

### Flipcharts / Overheads / PowerPoint slides 7 and 8

**Time: 5 min**

**Activity:** Brainstorming to review the leading causes of PPH.

**Objective:** Describe the causes of PPH.

#### Notes to the facilitator:

- Ask participants to list the leading causes of PPH.
- Write their responses on a flipchart.

**Brainstorming**
CT2-7

**What are the leading causes of PPH?**

**Notes to the facilitator:**

- Complete the participants' list to ensure that the leading causes of PPH have been listed.
- Ask for questions before proceeding.

Leading causes of PPH		CT2-8
<ul style="list-style-type: none"><li>• Uterine atony (causes 70-90% of PPH cases).</li><li>• Genital lacerations (2nd leading cause).</li><li>• Retained placenta (3rd leading cause).</li><li>• Uterine rupture and inversion.</li><li>• Blood-clotting disorders (disseminated intravascular coagulopathy).</li></ul>		

**Flipcharts / Overheads / PowerPoint slides 9, 10, and 11**

**Time: 5 min.**

**Activities:**

- Illustrated lecture to define uterine atony and explain how uterine contractions compress maternal blood vessels.
- Brainstorming to list the most important factors contributing to poor uterine tone in the postpartum period.

**Objective:** Describe factors that contribute to PPH.

**Notes to the facilitator:**

- Define uterine atony and explain how uterine atony causes PPH.

Uterine atony		CT2-9
<ul style="list-style-type: none"><li>• <b>Uterine atony</b> is a loss of tone in the uterine muscles.</li><li>• Uterine contractions after delivery of the placenta will compress maternal blood vessels at the placental site and stop bleeding.</li><li>• When the uterus does not have good tone, the woman will experience PPH because maternal blood vessels at the open placental site are not compressed.</li></ul>		

**Notes to the facilitator:**

- Ask participants to list factors that may contribute to poor uterine muscle tone in the postpartum period.
- Write their responses on a flipchart.

Brainstorming	
	CT2-10
<p><b>What factors contribute to poor uterine tone in the postpartum?</b></p>	

**Notes to the facilitator:**

- Complete the participants' list to ensure that the most common factors contributing to poor uterine tone have been listed.
- Emphasize that while there are some known factors that contribute to uterine atony, two-thirds of PPH occurs in women who have absolutely NO risk factors.

Factors contributing to the loss of uterine muscle tone in the postpartum	
	CT2-11
<ul style="list-style-type: none"><li>• Retained placenta or placental fragments</li><li>• Overdistention of the uterus due to multiple gestation, excess amniotic fluid, very large baby or multiparity</li><li>• Prolonged labor</li><li>• Induction or augmentation of labor</li><li>• Precipitous labor (labor lasting less than 3 hours)</li><li>• Full bladder</li></ul>	

## Flipchart / Overhead / PowerPoint slide 12

**Time: 5 min.**

**Activity:** Illustrated lecture to present two strategies to prevent women from dying of PPH.

### Notes to the facilitator:

- Begin this portion of the session by explaining that there are two ways to prevent death from PPH:
  1. Prevent PPH by providing high-quality care and performing AMTSL.AND
  2. Ensure timely diagnosis and management of PPH when it occurs.
- Explain that three factors will influence a woman's prognosis when she has a postpartum hemorrhage:
  - her hemoglobin,
  - how quickly PPH is accurately diagnosed, and
  - how quickly PPH is treated/managed.

How can providers prevent a woman from dying of PPH?	CT2-12
<ul style="list-style-type: none"><li>• Prevent PPH by providing high-quality care and performing AMTSL AND</li><li>• Ensure timely diagnosis and management of PPH when it occurs</li></ul>	

## Flipcharts / Overheads / PowerPoint slides 13, 14, 15, and 16

**Time: 5 min.**

**Activity:** Question-and-answer to explain how certain strategies can prevent PPH and/or reduce the risk that a woman will die from PPH (ensure timely diagnosis and management of PPH if it occurs and prevent/treat anemia so that the woman can tolerate blood loss after giving birth).

**Objective:** Explain ways to prevent PPH.

### Notes to the facilitator:

Prevention strategies – During antenatal care	CT2-13
<ul style="list-style-type: none"><li>• Develop a birth-preparedness plan.</li><li>• Develop a complication-readiness plan.</li><li>• Routinely screen to prevent and treat anemia.</li><li>• Help prevent anemia by addressing major causes, such as malaria and hookworm.</li><li>• Provide information about the signs of labor, when labor is too long, and when to come to the facility or contact the birth attendant.</li><li>• Help women and their families to recognize harmful customs practiced during labor (e.g., providing herbal remedies to increase contractions, health workers giving oxytocin by intramuscular injection during labor).</li><li>• Take culturally sensitive actions to involve men and encourage understanding about the urgency of labor and need for immediate assistance.</li></ul>	

- Ask participants to refer to the section on "PPH prevention and early detection" in Core Topic 2: PPH causes and prevention in the **Reference Manual**.
- For each PPH prevention strategy, ask participants to try to provide an explanation of how the strategy may prevent PPH and/or decrease the likelihood that the woman will die if PPH occurs. Complete their responses as necessary.
- Ask for questions before proceeding.



### Notes to the facilitator:

- Ask participants to refer to the section on “PPH prevention and early detection” in Core Topic 2: PPH causes and prevention in the **Reference Manual**.
- For each strategy, ask participants to try to provide an explanation of how the strategy may help prevent death from PPH. Complete their responses as necessary.

#### Prevention strategies – During labor and second stage

CT2-14

- Use a partograph.
- Ensure early referral when progress of labor is unsatisfactory.
- Encourage the woman to keep her bladder empty.
- Limit induction or augmentation use for medical and obstetric reasons.
- Limit induction or augmentation of labor to facilities equipped to perform a cesarean delivery.
- Do not encourage pushing before the cervix is fully dilated.
- Do not use fundal pressure to assist the birth of the baby.
- Do not perform routine episiotomy.
- Assist the woman in the controlled delivery of the baby's head and shoulders.

### Notes to the facilitator:

- Ask participants to refer to the section on “PPH prevention and early detection” in Core Topic 2: PPH causes and prevention in the **Reference Manual**.
- For each strategy, ask participants to try to provide an explanation of how the strategy may help prevent death from PPH. Complete their responses as necessary.

#### Prevention strategies – During third stage

CT2-15

- Provide AMTSL.
- Do not use fundal pressure (apply pressure on a woman's abdomen to help expel the placenta) to assist the delivery of the placenta.
- Do not perform controlled cord traction without administering a uterotonic drug.
- Do not perform controlled cord traction without providing countertraction to support the uterus.

### Notes to the facilitator:

- Ask participants to refer to the section on “PPH prevention and early detection” in Core Topic 2: PPH causes and prevention in the **Reference Manual**.
- For each strategy, ask participants to try to provide an explanation of how the strategy may help prevent death from PPH. Complete their responses as necessary.

#### Prevention strategies – After delivery of the placenta

CT2-16

- Routinely inspect the vulva, vagina, perineum, and anus to identify genital lacerations. Inspect the placenta and membranes.
- Massage the uterus at regular intervals after placental delivery to keep the uterus well contracted and firm (at least every 15 minutes for the first two hours after birth).
- Teach the woman to massage her own uterus to keep it firm. Instruct her on how to check her uterus and to call for assistance if her uterus is soft or if she experiences increased vaginal bleeding.
- Encourage the woman to keep her bladder empty during the immediate postpartum period.

**Flipchart / Overhead / PowerPoint slide 17**

**Time: 5 min.**

**Activity:** Question-response to problem-solve how AMTSL prevents PPH.

**Objective:** Describe factors that contribute to PPH.

**Notes to the facilitator:**

How does AMTSL prevent PPH ?	CT2-17
<ul style="list-style-type: none"><li>• Administration of a uterotonic</li><li>• Controlled cord traction</li><li>• Uterine massage</li></ul>	

- Ask participants to try to explain how each of the components of AMTSL helps to prevent PPH. Write their responses on the flipchart under each component.
- Complete their answers with the following explanations:
  - **Administration of a uterotonic** stimulates uterine contractions that 1) facilitate separation of the placenta from the uterine wall resulting in rapid delivery of the placenta and 2) compress maternal blood vessels at the placental site after delivery of the placenta.

- **Controlled cord traction** facilitates rapid delivery of the placenta and emptying of the uterus.
- **Uterine massage** stimulates uterine contractions and removes clots that may inhibit uterine contraction.

**Flipchart / Overhead / PowerPoint slide 18**

**Time: 5 min.**

**Activity:** Summary.

**Notes to the facilitator:**

- Ask participants to volunteer at least one new or interesting thing they learned during this session and to explain how it could be useful when returning to their work site.
- Ask for questions before proceeding.

Summary	CT2-18
Please list one interesting thing you have learned during this session and explain how it can be useful to you when you return to your work site.	

**Flipchart / Overhead / PowerPoint slide 19****Notes to the facilitator:**

- Encourage participants to work on learning activities found in the **Participant's Notebook** for Core Topic 2.
- Participants may work individually or in groups on the learning activities during breaks, in the evening, or in the clinical area when there are no clients.
- Participants may correct their learning activities by referring to suggested answers found in the **Participant's Notebook**. Facilitators should make themselves available to work with the participants to review answers for learning activities.

Learning activities	CT2-19
<ul style="list-style-type: none"><li>• Please complete learning activities found in the <b>Participant's Notebook</b> for Core Topic 2.</li><li>• You may work individually or in groups on the learning activities during breaks, in the evening, or in the clinical area when there are no clients.</li><li>• You may correct your answers individually or with another participant or the facilitator.</li><li>• See a facilitator if you have questions.</li></ul>	





## Core Topic 3: Uterotonic Drugs

**90 min.**

### Summary

In this section, you will review and compare the main drugs used to stimulate uterine contractions during third stage. There will also be an overview of the stability, storage, and costs of uterotonic drugs.

The injection of a uterotonic drug immediately after birth of the baby and before delivery of the placenta is one of the most important ways to prevent PPH. The most commonly used uterotonic drug, oxytocin, has proven to be very effective in both reducing the incidence of PPH and shortening the third stage of labor.

### Objectives

By the end of this topic, participants will be able to:

- Identify uterotonic drugs used in the third stage of labor.
- Explain advantages/disadvantages of the four major uterotonic drugs.
- Compare the stability of oxytocin and ergometrine in hot climates.
- Explain at least three ways to store oxytocin to keep it effective.
- Describe how to decide what uterotonic drug to use for AMTSL.

### Materials/resources needed for the session

- Reference Manual, Participant's Notebook, and Facilitator's Guide.
- Flipchart, flipchart stand, markers, and flipchart tape.

### Facilitator's notes

- This session contains detailed information on the major uterotonic drugs. Review the session content, especially regarding drug dosage/administration and storage to be sure that these correspond with country-specific or local guidelines. Adapt or revise information as needed.
- Samples of the drugs used in your region may be useful as teaching aids (use expired drug vials, for example, or pictures of these vials or tablets).
- Consider making separate handouts for each of the three drugs with detailed information from the chart. This may make the information easier to read and country-specific information can be included.

# Lesson Plan

**Uterotonic drugs**

**Name of presenter**  
*Prevention of Postpartum Hemorrhage Initiative  
(POPHI) Project*  
PATH



**Flipcharts / Overheads / PowerPoint slides 1 and 2****Time: 5 min.****Activity:** Review objectives of the session.**Objective:** Present an overview of the session.**Note to the facilitator:**

- Introduce the session by presenting the objectives: read the objectives, briefly summarize or ask a participant to read them aloud.

Objectives	CT3-1
By the end of this topic, learners will be able to:	
<ul style="list-style-type: none"><li>• Identify uterotonic drugs used in the third stage of labor.</li><li>• Explain advantages/disadvantages of the 4 major uterotonic drugs.</li><li>• Compare the stability of oxytocin and ergometrine in hot climates.</li><li>• Explain at least 3 ways to store oxytocin to keep it effective.</li><li>• Describe how to decide what uterotonic drug to use for AMTSL.</li></ul>	

**Notes to the facilitator:**

- Begin the session by giving a clear definition of a uterotonic.
- Ask participants if they have questions about the definition before continuing.

Definition	CT3-2
<ul style="list-style-type: none"><li>• <b>Uterotonics:</b> substances that stimulate uterine contractions and increase uterine tone</li></ul>	

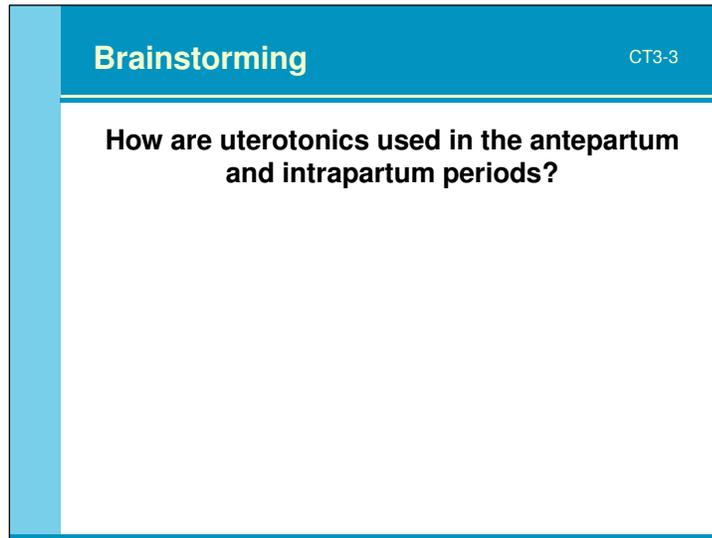
## Flipcharts / Overheads / PowerPoint slides 3 and 4

**Time: 10 min.**

**Activity:** Brainstorming and discussion to review indications and dangers of administering uterotonic drugs during the intrapartum period.

### Objectives:

- Review uses and contraindications for uterotonic drugs.
- Review dangers of uterotonic drug abuse.



**Brainstorming** CT3-3

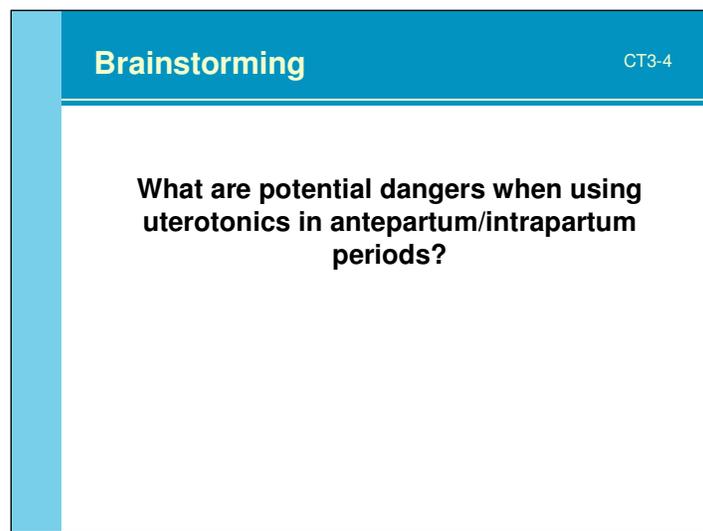
**How are uterotonics used in the antepartum and intrapartum periods?**

### Notes to the facilitator:

- Ask participants to list potential uses of uterotonic drugs before the woman has given birth.
- Write their answers on the flipchart. These may include cervical ripening, induction of labor, and augmentation of labor.

### Notes to the facilitator:

- Ask participants to list potential dangers of uterotonic drugs when used before the woman has given birth.
- Write their answers on the flipchart. These should include fetal distress, intrauterine fetal demise, and uterine rupture. In addition, induction/augmentation of labor contributes to uterine atony in the postpartum period.
- Brainstorm ideas on how to prevent or minimize potential dangers of using uterotonic drugs in the antepartum/intrapartum periods. These may include: only induce/augment labor when all indications are met, only induce/augment labor in facilities where there is an operating theatre, carefully monitor maternal/fetal conditions when inducing/augmenting labor.



**Brainstorming** CT3-4

**What are potential dangers when using uterotonics in antepartum/intrapartum periods?**



## Flipcharts / Overheads / PowerPoint slides 5 and 6

**Time: 5 min.**

**Activity:** Question-and-answer to review uterotonic drugs available in health facilities.

### Objectives:

- Identify uterotonic drugs that participants are familiar with.
- Link trade names of uterotonic drugs with their generic names.

### Notes to the facilitator:

- Draw a table with five rows and two columns. Put titles on the columns: *Trade Name* and *Generic Name*.
- Ask participants to brainstorm a list of uterotonic drugs used in their practice. As they list a uterotonic, write it in either the column "*trade name*" or "*generic name*."
- If a participant lists a uterotonic by the trade name, ask if participants know the generic name, and vice versa.

List of Uterotonics		CT3-5
Trade Name	Generic Name	

### Notes to the facilitator:

- Briefly review the trade and generic names for the uterotonic drugs most commonly used.

List of Uterotonics		CT3-6
Trade Name	Generic Name	
Syntocinon® / Pitocin	Oxytocin	
Methergine®	Ergometrine	
Syntometrine®	Ergometrine + Oxytocin	
Misoprostol (Cytotec®)	E1 analog prostaglandin	

## Flipcharts / Overheads / PowerPoint slides 7 and 8

**Time: 15 min.**

**Activity:** Small group work to analyze characteristics of uterotonic drugs.

**Objective:** Explain the advantages and disadvantages of uterotonic drugs used for AMTSL.

### Notes to the facilitator:

- Ask participants to refer to the classroom learning activity #1 for Core Topic 3: Uterotonic Drugs in the **Participant's Notebook**.
- Ask participants to work in groups of two. Give them 2-3 minutes to study Table 3. Uterotonic drugs for AMTSL in the **Reference Manual**. They should decide which of the uterotonic drugs:

(1) works the fastest; (2) has the longest action; (3) causes tonic contractions; (4) has a common side effect of shivering and elevated temperature; (5) has a common side effect of headache; (6) is contraindicated in women with or having history of hypertension, heart disease, retained placenta, preeclampsia, and eclampsia; (7) has no contraindications when administered in the postpartum period.

Answers			
	Oxytocin	Ergometrine	Misoprostol
Works the fastest.	X		
Has the longest action.		X	
Causes tonic contractions.		X	
Has a common side effect of shivering and elevated temperature.			X
Has a common side effect of headache.		X	
Is contraindicated in women with or having history of hypertension, heart disease, retained placenta, pre-eclampsia, eclampsia.		X	
Has no contraindications when administered in the postpartum period.	X		

### Small Group Work

#### Review of Uterotonics

Find one partner to work with.

- Refer to classroom learning activity 1 for Core Topic 3: Uterotonic Drugs in the **Participant's Notebook**.
- Answer the questions about uterotonics in learning activity 1 by studying Table 3, Uterotonic drugs for AMTSL, in the **Reference Manual**.

### Notes to the facilitator:

- After participants have had a chance to look through the table and answer the questions, call the group together. Read each sentence in the first column and ask participants to call out the answer. Put an "x" in the appropriate column.
- Review drug action/effectiveness and side effects/cautions for each uterotonic drug.

- Emphasize the following points:
  - If all injectable uterotonic drugs are available, skilled attendants should offer oxytocin to all women in preference to ergometrine/methylethergometrine or oral misoprostol (600 mcg)
  - In the absence of AMTSL, a health worker trained in the use of a uterotonic drug (oxytocin or misoprostol) should offer use of a uterotonic without controlled cord traction to all women



## Flipcharts / Overheads / PowerPoint slides 9 and 10

**Time: 10 min.**

**Activity:** Small group work to analyze the stability of uterotonic drugs when exposed to heat and light.

**Objective:** Compare the stability of oxytocin and ergometrine in hot climates.

### Notes to the facilitator:

- Ask participants to refer to classroom learning activity #2 for Core Topic 3: Uterotonic Drugs in the **Participant's Notebook**.
- Ask participants to work in groups of two. Give them 2–3 minutes to refer to the sections "Keeping uterotonic drugs effective" and "Tips to increase uterotonic drug effectiveness" within Core Topic 3: Uterotonic Drugs in the **Reference Manual**. They should rank the uterotonic drugs by:
  - Their stability when exposed to heat. They should give a "1" to the most stable and a "3" to the least stable (misoprostol 1, oxytocin 2, ergometrine 3).
  - Their stability when exposed to light. They should give a "1" to the most stable and a "3" to the least stable (misoprostol 1, oxytocin 2, ergometrine 3).

**Small Group Work**
CT3-9

**Review of uterotonics**

- Find one partner to work with.
- Refer to classroom learning activity 2 for Core Topic 3: Uterotonic Drugs.
- Answer the questions about stability of uterotonics in learning activity 2 by studying sections *Keeping uterotonic drugs effective* and *Tips to increase uterotonic drug effectiveness* within Core Topic 3: Uterotonic Drugs in the **Reference Manual**.

### Notes to the facilitator:

- After participants have had a chance to look through the table and answer the questions, call the group together. Read each sentence in the first column and ask participants to call out the answers. Write the rank number in the appropriate column.
- Summarize this part of the session by emphasizing that while neither ergometrine nor oxytocin is stable when exposed to heat, oxytocin is much more stable than ergometrine when exposed to either heat or light.
- Re-emphasize that while misoprostol is more stable than oxytocin, oxytocin is still the uterotonic of choice because of its effectiveness, action, lack of contraindications in the postpartum period, and cost.

**Answers**
CT3-10

	Oxytocin	Misoprostol	Ergometrine
Stability when exposed to heat*	2	1	3
Stability when exposed to light*	2	1	3

\*Most stable: 1; Least stable: 3

## Flipchart / Overhead / PowerPoint slide 11

**Time: 30 min.**

**Activity:** Case studies to review storage of uterotonic drugs in different situations.

**Objective:** Explain at least three ways to store oxytocin to keep it effective.

### Notes to the facilitator:

- Divide participants into four groups to work on case studies.
- Assign each group one of the four case studies found within the classroom learning activities for Core Topic 3: Uterotonic Drugs in the **Participant's Notebook**.
- Give each group 10 minutes to work through the case study, using Table 4, Recommended guidelines for transport and storage of uterotonic drugs, and the section "Tips to keep uterotonic drugs as effective as possible" in the **Reference Manual** as a guide.
- After 10 minutes, bring all the groups together and ask each group to present their case study. Suggested answers can be found in the **Participant's Notebook** and **Facilitator's Guide**.
- Facilitate a group discussion if there is controversy.
- Summarize the case study exercise by emphasizing that importance or proper storage of uterotonic drugs.

Small Group Work	
Storage of uterotonics	
	CT3-11
<ul style="list-style-type: none"><li>• Divide into 4 groups to work on case studies found within the classroom learning activities for Core Topic 3: Uterotonic Drugs in the <b>Participant's Notebook</b>.</li><li>• Group 1 – work on case study #1; Group 2 – work on case study #2; Group 3 – work on case study #3; Group 4 – work on case study #4.</li><li>• Each group has 10 minutes to work through the case study. Use <i>Table 4, Recommended guidelines for transport and storage of uterotonic drugs</i>, and the section <i>Tips to keep uterotonic drugs as effective as possible</i> in the <b>Reference Manual</b> for guidance.</li></ul>	

## Flipchart / Overhead / PowerPoint slide 12

**Time: 5 min.**

**Activity:** Group discussion to choose the most appropriate uterotonic for AMTSL.

**Objective:** Describe how to decide what uterotonic drug to use for AMTSL.

### Notes to the facilitator:

- Facilitate a discussion to decide which of the uterotonic drugs should be the uterotonic of choice for AMTSL. Participants should consider the issues listed in the slide / flipchart / overhead on the left.
- Summarize this section of the session by explaining that oxytocin is the uterotonic of choice for AMTSL because it is very effective, acts the quickest, has minimal or no side effects, has no contraindications in the postpartum period, is more stable than ergometrine when exposed to heat and light, and is relatively inexpensive.

Choice of uterotonic when practicing AMTSL	
	CT3-12
<b>Considerations:</b> <ul style="list-style-type: none"><li>• Effectiveness</li><li>• Action</li><li>• Side effects</li><li>• Contraindications</li><li>• Stability when exposed to heat</li><li>• Stability when exposed to light</li><li>• Cost</li></ul>	

**Flipcharts / Overheads / PowerPoint slides 13 and 14****Time: 10 min.****Activity:** Summary.**Note to the facilitator:**

- Summarize the session by asking participants to answer the three questions listed on the flipchart / overhead / PowerPoint slide.

Summary	
	CT3-13
<ul style="list-style-type: none"><li>• Why is oxytocin the uterotonic of choice for the practice of AMTSL?</li><li>• If your health facility does not have oxytocin, which uterotonic should you use for the practice of AMTSL?</li><li>• Why is misoprostol not recommended as a first line drug for use with AMTSL?</li></ul>	

**Note to the facilitator:**

- Summarize the session by reviewing FIGO/ICM recommendations from November 2006.

FIGO/ICM Recommendations	
	CT3-14
<ul style="list-style-type: none"><li>• If all injectable uterotonics are available, skilled attendants should offer oxytocin to all women in preference to ergometrine / methylergometrine or oral misoprostol (600 mcg).</li><li>• If oxytocin is not available, skilled attendants should offer ergometrine / methylergometrine or the fixed drug combination of oxytocin and ergometrine to women without hypertension or heart disease.</li><li>• In the absence of AMTSL, a health worker trained in the use of a uterotonic drug (oxytocin or misoprostol) should offer use of a uterotonic without controlled cord traction to all women (uterine massage should still be performed).</li></ul>	

## Flipchart / Overhead / PowerPoint slide 15

### Notes to the facilitator:

- Encourage participants to work on learning activities found in the **Participant's Notebook** for Core Topic 3.
- Participants may work individually or in groups on the learning activities during breaks, in the evening, or in the clinical area when there are no clients.
- Participants may correct their learning activities by referring to suggested answers found in the **Participant's Notebook**. Facilitators should make themselves available to work with the participants to review answers for learning activities.

### Learning activities

CT3-15

- Please complete learning activities found in the **Participant's Notebook** for Core Topic 3.
- You may work individually or in groups on the learning activities during breaks, in the evening, or in the clinical area when there are no clients.
- You may correct your answers individually or with another participant or the facilitator.
- See a facilitator if you have questions.



## Core Topic 4: Steps in active management of the third stage of labor

**3 hours, 30 min.**

### Summary

In this section, you will teach/demonstrate the steps in active management of the third stage of labor. After a demonstration of the steps of AMTSL, you will work with participants as they practice on a model to prepare for practice in the clinical area.

### Objectives

By the end of this topic, participants will be able to:

- Describe the steps of AMTSL.
- Correctly demonstrate the steps of AMTSL using a checklist.

### Materials/resources needed for the session

- CD-ROM demonstrating the steps in AMTSL, television, and DVD player (or computer and LCD if a television is not available).
- Reference Manual, Participant's Notebook, and Facilitator's Guide.
- Flipchart, flipchart stand, markers, and flipchart tape.
- Bed (gurney or table are acceptable if a bed is not available), pillow, and bed sheets.
- Obstetric and newborn models (if obstetric models are not available, volunteers can act as the woman in labor and a doll with placenta can be used to simulate delivery of the placenta), 2 cloths for the newborn, 1 cloth for the woman's abdomen, delivery kit (1 scissors, 2 clamps), cord ties or clamps, and kidney basin or bowl to collect the placenta.
- Infection protection equipment and supplies: protective gear (glasses, plastic apron, shoe covering), bucket, chlorine, water, sterile and exam gloves, soap, towels, waste bin, and utility gloves.
- Oxytocin, syringe, needle, alcohol and cotton swabs, and sharps disposal box.

### Facilitator's notes

Demonstration and practice stations need to be set up ahead of time. Ideally, there will be at least one facilitator for every four participants practicing. You may choose to teach the infection prevention topic here so that participants can incorporate it while practicing the new skills.

## Lesson Plan

Steps in active management of the third stage of labor (AMTSL)

**Name of presenter**  
*Prevention of Postpartum Hemorrhage Initiative (POPPHI) Project*  
PATH

 **USAID**  
FROM THE AMERICAN PEOPLE

 **POPPHI**  
Prevention of Postpartum Hemorrhage Initiative

### Flipchart / Overhead / PowerPoint slide 1

**Time: 5 min.**

**Activity:** Present an overview of the session.

**Objective:** Review objectives of the session.

#### Notes to the facilitator:

- Introduce the session by presenting the objectives: read the objectives, briefly summarize or ask a participant to read them aloud.

**Objectives** CT4-1

By the end of this topic, learners will be able to:

- Describe the steps of AMTSL
- Correctly demonstrate the steps of AMTSL using a checklist



## Flipchart / Overhead / PowerPoint slide 2

**Time: 20 min.**

**Activity:** Small group work to review routine care for the woman and newborn.

**Objective:** Review routine care for the woman and newborn.

### Notes to the facilitator:

- Introduce this session on AMTSL by emphasizing that AMTSL is only one part of care for the woman and newborn. Encourage the provision of quality care, good client-provider communication, and application of infection prevention practices. Remind participants that they should be aware of and follow national guidelines for the prevention of mother to child transmission of HIV/AIDS.
- Divide the participants into 4 groups. Assign one subject (care of the woman, care of the newborn, preparations for AMTSL, and monitoring the woman and newborn after delivery of the placenta) to each of the groups.
- Each group should refer to the **Reference Manual** and prepare a brief summary of their topic. Give them 10 minutes to prepare their presentation.
- Ask each group to present a brief summary.
- Facilitate a discussion about the importance of quality care.

Small Group Work Maternal and newborn care	CT4-2
<ul style="list-style-type: none"> <li>• Group 1: Describe care of the woman (refer to the Reference Manual).</li> <li>• Group 2: Describe care of the newborn (refer to the Reference Manual).</li> <li>• Group 3: Describe preparations for AMTSL (refer to the Reference Manual).</li> <li>• Group 4: Describe how to monitor the woman and newborn after delivery of the placenta (refer to the Reference Manual).</li> </ul>	

## Flipchart / Overhead / PowerPoint slide 3

**Time: 30 min.**

**Activity:** Reminder that PMTCT interventions need to be integrated into care during labor and childbirth

**Objective:** Explain that PMTCT activities need to be integrated into care for newborns and women during third stage and the immediate postpartum period.

Integration of PMTCT activities	CT4-3
<ul style="list-style-type: none"> <li>• Apply national guidelines for PMTCT for the woman and newborn <b>in addition to</b> routine care during labor, childbirth, and in the immediate postpartum</li> </ul>	

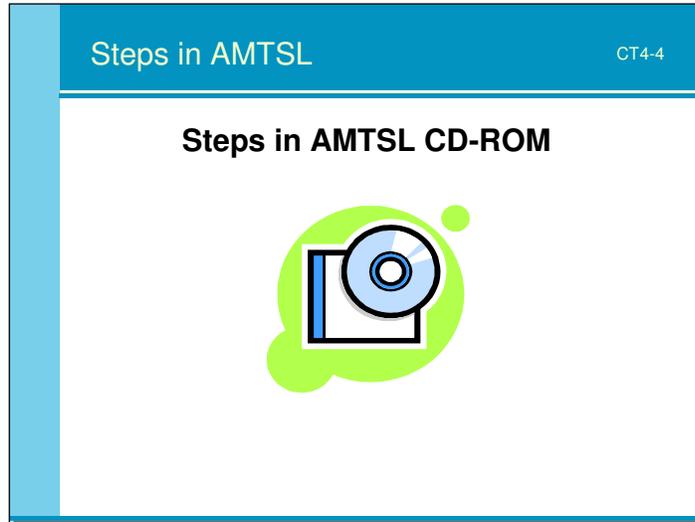
### Notes to the facilitator:

- Explain that a detailed description of PMTCT interventions is beyond the scope of this training. However, participants need to refer to national guidelines for PMTCT interventions and apply them appropriately.
- Remind participants that PMTCT interventions need to be integrated into care during third stage and the immediate postpartum.

**Flipchart / Overhead / PowerPoint slide 4**

**Time: 30 min.**

**Activity:** *If possible*, view the CD-ROM with a demonstration of the steps of AMTSL (<http://www.pphprevention.org/amtslweb-en/index.html>).



**Objective:** Describe the steps of AMTSL.

**Notes to the facilitator:**

- Show the CD-ROM with the demonstration of AMTSL.
- Ask if participants have questions and show the CD-ROM as many times as necessary.



## Flipcharts / Overheads / PowerPoint slides 5, 6, 7, 8, 9, 10, 11, and 12

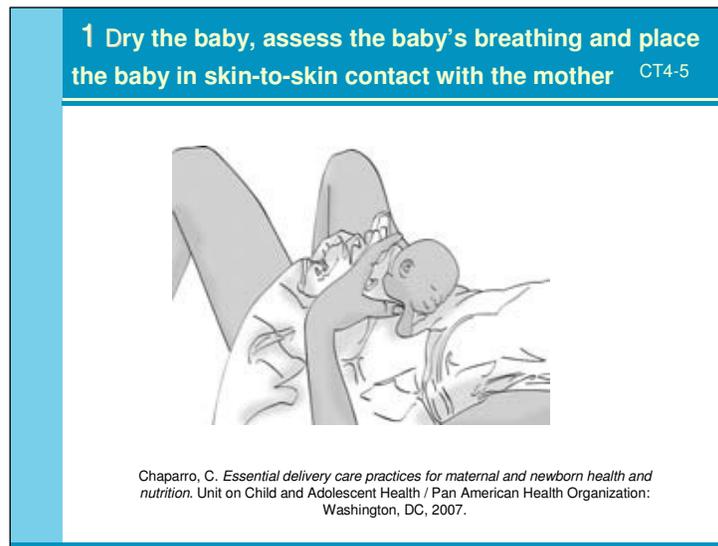
**Time: 10 min.**

**Activity:** Illustrated lecture.

**Objective:** Discuss the steps of AMTSL.

### Notes to the facilitator:

- Ask participants to turn to the section "Steps for AMTSL" in Core Topic 4: AMTSL in the **Reference Manual**. Review the components of AMTSL integrated with immediate newborn care together.
- After delivery, immediately dry the infant and assess the baby's breathing. Then place the reactive infant, prone, on the mother's abdomen.\* Remove the cloth used to dry the baby and keep the infant covered with a dry cloth or towel to prevent heat loss.



### Notes to the facilitator:

- Place the infant directly on the mother's chest, prone, with the newborn's skin touching the mother's skin.
- While the mother's skin will help regulate the infant's temperature, cover both the mother and infant with a dry, warm cloth or towel to prevent heat loss.
- Cover the baby's head with a cap or cloth.



**Notes to the facilitator:**

- Give a uterotonic drug within 1 minute of childbirth (oxytocin 10 IU IM is the uterotonic of choice), after ruling out the presence of another baby.
- A uterotonic stimulates uterine contractions, which will, in turn, speed up separation of the placenta from the uterine wall.
- A uterotonic will help prevent uterine atony after delivery of the placenta.
- Ruling out the presence of another baby before giving a uterotonic drug will prevent the potential complication of a trapped twin.

**3 Give uterotonic drug (oxytocin 10 IU IM is the uterotonic of choice) within 1 minute of childbirth, after ruling out the presence of another baby.** CT4-7

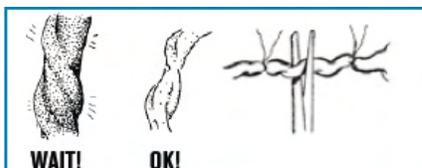


2005. Active Management of the Third Stage of Labor: A Demonstration [CD-ROM]. Copyright © 2005 JHPIEGO.

**Notes to the facilitator:**

- Wait to clamp and cut the cord until the cord ceases to pulsate or 2–3 minutes after the baby’s birth, whichever comes first. Studies now show that delayed clamping and cutting of the umbilical cord is helpful to both term and preterm babies.

**4 Cut the umbilical cord** CT4-8

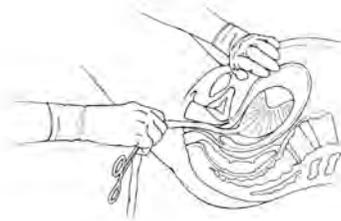


Chaparro, C. *Essential delivery care practices for maternal and newborn health and nutrition.* Unit on Child and Adolescent Health / Pan American Health Organization: Washington, DC, 2007.



### Notes to the facilitator:

**5** Deliver the placenta by controlled traction on the umbilical cord and counterpressure to the uterus. CT4-9



2005. Active Management of the Third Stage of Labor: A Demonstration [CD-ROM]. Copyright © 2005 JHPIEGO.

towards the woman's head. Supporting or guarding the uterus (sometimes called "counter-pressure" or "countertraction") helps prevent uterine inversion during controlled cord traction.

- Controlled cord traction should only be done during a contraction.

- Controlled cord traction involves pulling with a firm, steady tension on the cord in a downward direction during contractions. Controlled cord traction helps the placenta descend into the vagina and facilitates its delivery. The uterus cannot contract efficiently if the placenta is still inside.
- When performing controlled cord traction, the uterus needs to be supported by applying pressure on the lower segment of the uterus in an upward direction

### Notes to the facilitator:

- **Massage the uterus immediately** after delivery of the placenta and membranes until it is firm.
- Massaging the uterus stimulates uterine contractions and helps to prevent PPH. Uterine atony is the leading cause of PPH.
- After you stop massage, it is important to make sure that the uterus does not relax again.
- Teach the woman how to massage her own uterus and ask her to call if her uterus is soft.

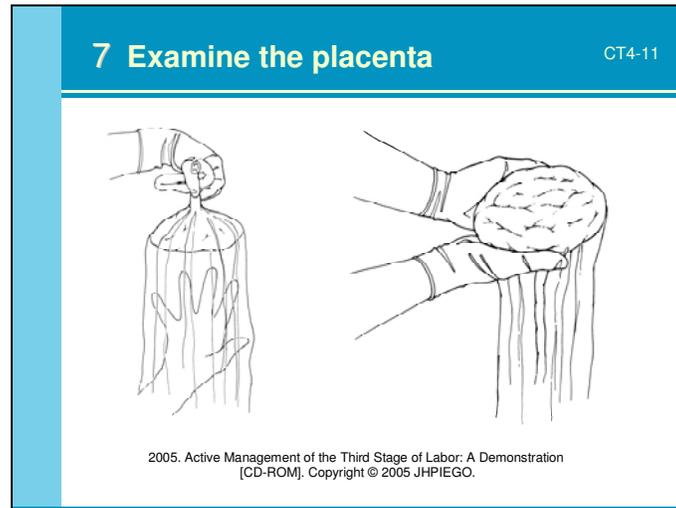
**6** Massage the uterus through the abdomen after delivery of the placenta. CT4-10



Life-Saving Skills Manual for Midwives, Draft, 4th edition  
Copyright © 2008 ACNM.

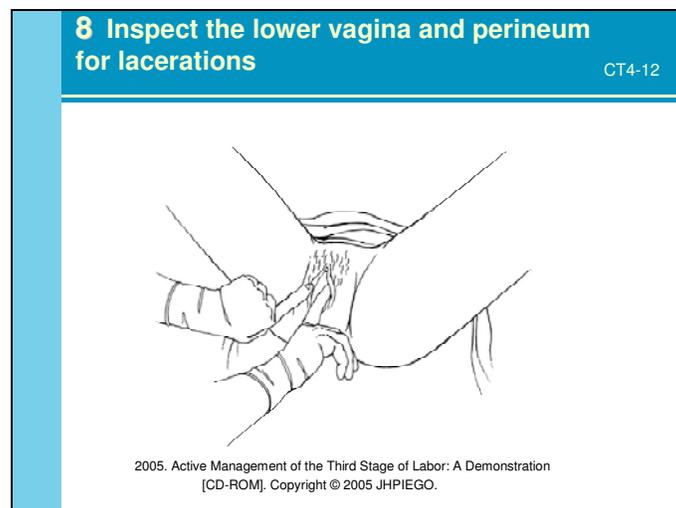
**Notes to the facilitator:**

- Check fetal and maternal sides of the placenta and membranes to be sure they are complete.
- Even a small amount of placental tissue or membranes can prevent uterine contractions and cause PPH.
- Retained placenta is the third leading cause of PPH.



**Notes to the facilitator:**

- Gently separate the labia and inspect the lower vagina and perineum for lacerations that may need to be repaired to prevent further blood loss.
- Tears in the birth canal are the second leading cause of PPH.





## Flipcharts / Overheads / PowerPoint slides 13, 14, and 15

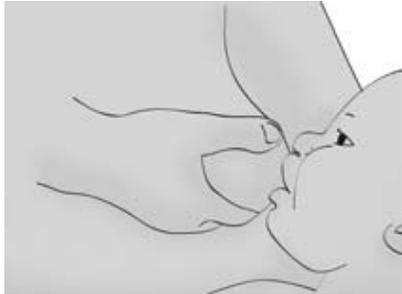
**Time: 10 min.**

**Activity:** Illustrated lecture.

**Objective:** Discuss monitoring the woman and newborn the first two hours after childbirth.

**Notes to the facilitator:**

Encourage breastfeeding within 1 hour after birth, if that is her choice
CT4-13



Chaparro, C. *Essential delivery care practices for maternal and newborn health and nutrition*. Unit on Child and Adolescent Health / Pan American Health Organization: Washington, DC, 2007.

- If the woman has chosen to breastfeed, the mother and baby may need assistance to breastfeed within the first hour after the birth and before transferring them out of the delivery room.
- Assess readiness of the woman and newborn to breastfeed before initiating breastfeeding; do not force the mother and baby to breastfeed if they are not ready.

**Notes to the facilitator:**

- Remind participants to follow national guidelines for the prevention of mother-to-child transmission of HIV/AIDS.
- During the first two hours after the delivery of the placenta, monitor the woman at least every 15 minutes (more often if needed) during the first hour after birth:
  - Palpate the uterus to check for firmness.
  - Massage the uterus until firm.
  - Check for excessive vaginal bleeding.
  - Ask the woman to call for help if bleeding increases or her uterus gets soft.
  - If excessive bleeding is detected, take action to evaluate and treat PPH immediately.
  - Make sure the uterus does not become soft after you stop massaging.
  - Teach the woman how the uterus should feel and how to massage it herself.

Monitor the woman closely after delivery of the placenta
CT4-14

- During the first 2 hours after delivery of the placenta, monitor the woman at least every 15 minutes (more often if needed) during the first hour after birth:
  - Palpate the uterus to check for firmness.
  - Massage the uterus until firm.
  - Check for excessive vaginal bleeding.
  - Ask the woman to call for help if bleeding increases or her uterus gets soft.
  - If excessive bleeding is detected, take action to evaluate and treat PPH immediately.

**Notes to the facilitator:**

- Remind participants to follow national guidelines for the prevention of mother-to-child transmission of HIV/AIDS.
- Check the baby at the same time you check the mother, every 15 minutes during the first two hours after childbirth:
  - Check the baby's breathing.
  - Check the baby's color.
  - Check warmth by feeling the baby's feet.
  - Check the cord for bleeding.
  - Take immediate action if a problem is detected.

<b>Monitor the newborn closely</b>		CT4-15
<ul style="list-style-type: none"><li>• Check the baby at the same time you check the mother, every 15 minutes during the first 2 hours after childbirth:<ul style="list-style-type: none"><li>• Check the baby's breathing.</li><li>• Check the baby's color.</li><li>• Check warmth by feeling the baby's feet.</li><li>• Check the cord for bleeding.</li><li>• Take immediate action if a problem is detected.</li></ul></li></ul>		



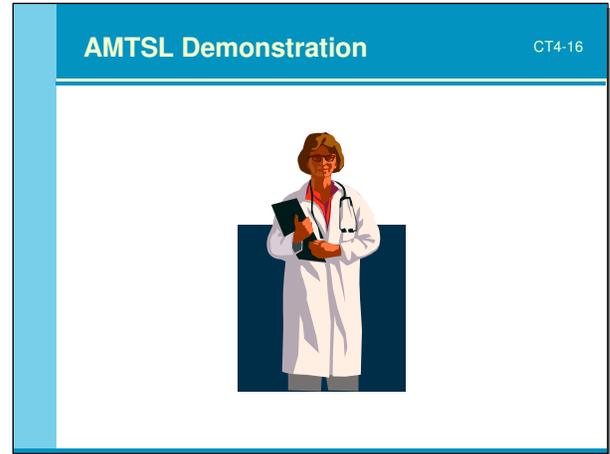
### Flipchart / Overhead / PowerPoint slide 16

**Time: 15 min.**

**Activity:** Demonstration of the steps of AMTSL following the Practice Checklist.

#### Notes to the facilitator:

- Ask participants to stand around the table where you are performing the demonstration. Make sure that everyone can see.
- Ask participants to follow the demonstration with the practice checklist in the **Participant's Notebook**.
- One facilitator will play the role of the woman and the other the role of the provider.
- Ask a volunteer to read the steps in the practice checklist as the facilitators perform the demonstration. It is important that you follow the steps as they are listed in the practice checklist.
- Provide information about AMTSL as you are performing the demonstration. Avoid giving a lecture.
- Ask participants if they have questions, and repeat as many of the steps as necessary.



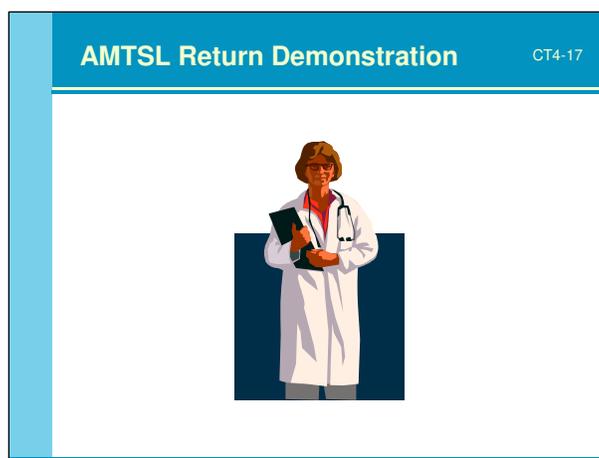
### Flipchart / Overhead / PowerPoint slide 17

**Time: 15 min.**

**Activity:** Return demonstration—AMTSL and examination of the placenta.

#### Notes to the facilitator:

- Ask two participants to volunteer performing a return demonstration of AMTSL. One volunteer will perform the skill as the other volunteer reads the steps in the learning guide. The other participants should follow the steps using the practice skill checklist.
- Ask the volunteer to provide feedback on his/her own performance, then ask other participants to provide feedback, and finally provide constructive feedback on the volunteer's performance.
- Ask participants if they have questions and repeat as many of the steps as necessary.



## Flipchart / Overhead / PowerPoint slide 18

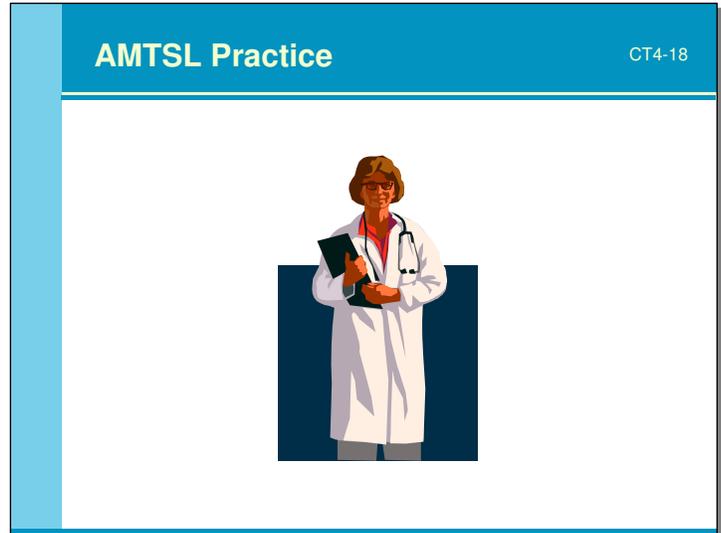
**Time: 1 hour 30 minutes**

**Activity:** Practice skills on models—AMTSL and examination of the placenta.

**Objective:** Correctly demonstrate the steps of AMTSL using the learning guide.

### Notes to the facilitator:

- Ask participants to work together in their teams to help each other learn the skill.
- One team member will perform the skill as the learning partner reads the steps in the learning guide.
- Explain how to fill in the practice skill checklist developed for use when practicing on models.
- Encourage learning partners to provide constructive feedback to each other in order to improve performance.
- Circulate around the classroom to provide assistance and feedback to participants as they practice AMTSL on a model.



## Flipchart / Overhead / PowerPoint slide 19

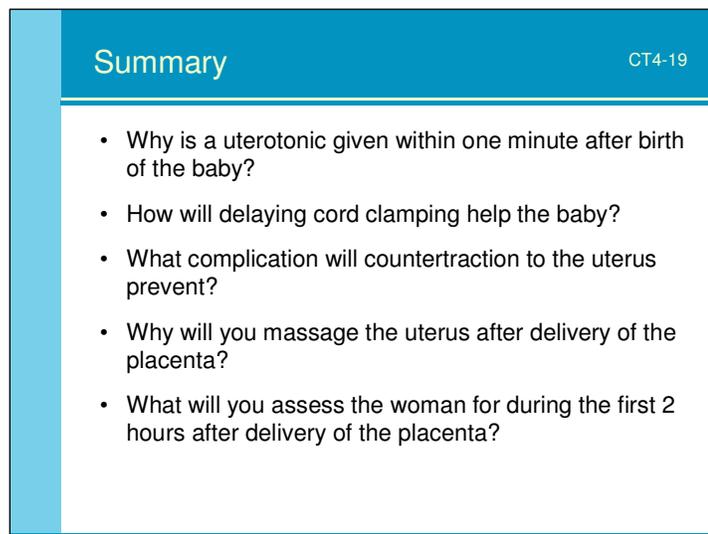
**Time: 5 min.**

**Activity:** Summary.

**Objective:** Review the most important points in the session.

### Notes to the facilitator:

- Review the most important points of the session by asking participants the questions listed on the flipchart / overhead / PowerPoint slide.
- Involve participants as much as possible in the summary.
- Ask for questions.



**Flipchart / Overhead / PowerPoint slide 20****Notes to the facilitator:**

- All participants will need to be evaluated and found competent in simulations before they can begin clinical practice with clients.
- Encourage participants to practice their skills on the model.

Practicing skills on model	
	CT4-20
<ol style="list-style-type: none"><li>1. Practice AMTSL using the practice checklist with your partner.</li><li>2. When you can perform the skill on a model without looking at the practice checklist, ask a facilitator to evaluate your performance on the model.</li></ol>	

**Flipchart / Overhead / PowerPoint slide 21****Notes to the facilitator:**

- Encourage participants to work on learning activities found in the **Participant's Notebook** for Core Topic 4.
- Participants may work individually or in groups on the learning activities during breaks, in the evening, or in the clinical area when there are no clients.
- Participants may correct their learning activities by referring to suggested answers found in the **Participant's Notebook**. Facilitators should make themselves available to work with the participants to review answers for learning activities.

Learning activities	
	CT4-21
<ul style="list-style-type: none"><li>• Please complete learning activities found in the <b>Participant's Notebook</b> for Core Topic 4.</li><li>• You may work individually or in groups on the learning activities during breaks, in the evening, or in the clinical area when there are no clients.</li><li>• You may correct your answers individually or with another participant or the facilitator.</li><li>• See a facilitator if you have questions.</li></ul>	





## Learning the steps in AMTSL: Instructions for using checklists

There are two types of checklists: practice and evaluation checklists.

- **Practice checklist:** While learning and practicing the skills being taught in this course, the participant will use the practice checklist. The practice checklist contains the individual steps or tasks in the sequence required to perform all the skills or activities being taught in a standardized way. Because the practice checklist is used to assist in developing skills, it is important that the rating (scoring) be done carefully and as objectively as possible.
- **Evaluation checklist:** The evaluation checklist is less detailed than the practice checklist and is used to evaluate the participant's ability to competently complete the skills being taught in this course.

### Instructions:

This checklist is written as if the provider were conducting the birth alone. Ideally, though, an assistant gives the oxytocin injection after the provider checks that there is not another baby and while the provider assesses and dries the baby. The assistant then assists the mother with the baby.

- Fill in the date in the correct column at the right side of the checklist.
- When filling in the evaluation checklist, indicate if the participant is being evaluated using a model or in the clinical area with a real patient by writing an "M" if the participant is evaluated on a model or a "C" if the participant is evaluated in the clinical area.
- Give points to each step of the skill:

1 = Performs the step or task completely and correctly.

0 = Unable to perform the step or task completely or correctly.

0 = Not observed: Step, task, or skill not performed by participant during evaluation by facilitator.

N/A (Not applicable) = Step is not needed.

- At the end of each performance, using the learning guide:
  - Ask participant to provide feedback about his/her own performance.
  - Praise the participant for steps that were proficiently or competently performed.
  - Work out a plan to improve performance on steps that need improvement.
- Before practicing on a model or in the clinical area, review the participant's previous performance, answer any questions the participant may have, ask how the participant plans to work on steps he/she had difficulty with during the last performance, and plan for the practice session.

- When the participant is ready to be evaluated using the **evaluation checklist**, the facilitator will calculate a percentage score using the following formulas:
  - Add total points achieved for each step/activity.
  - Add total points achieved for all steps/activities and fill in at end of the checklist (A).
  - Add total points that were N/A for all steps/activities (B).
  - Subtract B from 44 (the total possible points) to calculate the possible points for the case observed (C).
  - Obtain the participant's score by dividing A by C and multiplying by 100.



## Practice Checklist for Active Management of Third Stage of Labor

Training facilitators or participants can use the following checklist to gauge progress while learning to perform AMTSL.

**Checklist directions**

Rate the performance of each step or task using the following rating scale:

**1** = Performs the step or task completely and correctly.

**0** = Unable to perform the step or task completely or correctly or the step/task was not observed.

**N/A** (not applicable) = Step was not needed.

<b>Practice checklist: AMTSL steps</b>	<b>Date</b>				
<b>Rating</b>					
<b>Emotional support</b>					
1. Explain to the woman and her support person what will be done, and encourage their questions.					
2. Listen to what the woman and her support person have to say.					
3. Provide emotional support and reassurance, and keep the woman and her family informed throughout birth and during the immediate postpartum period.					
<b>Preparation</b>					
1. Wear a clean plastic or rubber apron, rubber boots, and eye goggles.					
2. Wash hands thoroughly with soap and water, and dry them with a clean, dry cloth (or air dry).					
3. Use sterile or high-level disinfected (HLD) surgical gloves on both hands.					
4. Place a sterile drape from the delivery pack under the woman’s buttocks, another over her abdomen, and use a third drape to receive the baby.					
5. Prepare uterotonic drug (oxytocin is the uterotonic of choice).					
6. Prepare other essential equipment for the birth before onset of the second stage of labor.					
7. Ask the woman to empty her bladder when second stage is near (catheterize only if the woman cannot urinate and bladder is full).					
8. Assist the woman to assume the position of her choice (squatting, semi-sitting) and allow her to change position according to what’s most comfortable for her.					

Practice checklist: AMTSL steps	Date				
	Rating				
<b>Immediate care of the newborn</b>					
1. Place the baby on the mother's abdomen. Thoroughly dry the baby while assessing the baby's breathing.					
2. If the baby is not crying or breathing at least 30 times per minute within 30 seconds of birth, <b>call for help</b> and begin resuscitation. Otherwise, the baby should remain with the mother.					
3. Place the baby in skin-to-skin contact with the mother to maintain warmth, and cover the baby—including the head—with a clean, dry cloth while keeping the face unobstructed.					
4. If the <b>mother is not able to hold the baby</b> , ask her companion or an assistant to care for the baby.					
<b>AMTSL step 1: Administration of a uterotonic drug</b>					
1. Palpate the uterus to make sure no other baby is present.					
2. If no other baby is present, administer a uterotonic drug (oxytocin 10 IU IM is the uterotonic of choice) within one minute of delivery. <sup>1</sup>					
<b>AMTSL step 2: Controlled cord traction</b>					
1. Wait approximately 2–3 minutes after the birth, then place one clamp 4 cm from the baby's abdomen. <sup>2</sup>					
2. Gently milk the cord towards the woman's perineum and place a second clamp on the cord approximately 1 cm from the first clamp.					
3. Cut the cord using sterile scissors, covering the scissors with gauze to prevent blood spurts. Tie the cord after the provider performs AMTSL and completes initial care of the mother and baby.					
4. Place the palm of the other hand on the lower abdomen just above the woman's pubic bone to assess for uterine contractions (do not massage the uterus before the placenta is delivered).					
5. Keep slight tension on the cord and await a strong uterine contraction (2–3 minutes).					
6. When there is a uterine contraction, apply countertraction to the uterus with the hand above the pubic bone (apply pressure on the uterus in an upward direction—towards the woman's head).					
7. While applying countertraction to the uterus, apply firm, steady traction to the cord, pulling downward on the cord following the direction of the birth canal.					
8. If the <b>placenta does not descend</b> during 30 to 40 seconds of controlled cord traction and there are no signs of placental separation), stop controlled cord traction.					

1 If a woman has an IV, an option may be to give her 5 IU of oxytocin by slow IV push.

2 This action allows red blood cells to transfer from the placenta to the baby, decreasing the incidence of infant anemia.



Practice checklist: AMTSL steps	Date				
	Rating				
9. Gently hold the cord and wait until the uterus is well contracted again. If necessary, clamp the cord closer to the perineum as it lengthens.					
10. When there is another contraction, repeat steps 6 through 9.					
<b>Delivery of the placenta</b>					
1. As the placenta delivers, hold it in both hands and gently turn it until the membranes are twisted.					
2. Slowly pull to complete the delivery. Move membranes up and down until they deliver.					
3. If the <b>membranes tear</b> , gently examine the upper vagina and cervix wearing sterile or HLD gloves and use a sponge forceps to remove any remaining pieces of membrane.					
4. Place the placenta in the receptacle provided (for later examination).					
<b>AMTSL step 3: Uterine massage</b>					
1. Immediately massage the fundus of the uterus through the woman's abdomen until the uterus is contracted (firm).					
2. Check that the uterus is firm after uterine massage is stopped. If the uterus is soft, repeat massage.					
3. Instruct the woman on how the uterus should feel and how to perform uterine massage.					
<b>Examining the birth canal</b>					
1. Direct a strong light onto the perineum.					
2. Gently separate the labia and inspect the lower vagina for lacerations.					
3. Inspect the perineum for lacerations.					
4. Repair lacerations if necessary.					
<b>Examining the placenta</b>					
1. Hold the placenta in the palms of the hands, with maternal side facing upwards.					
2. Check whether all of the lobules are present and fit together.					
3. Hold the cord with one hand and allow the placenta and membranes to hang down.					
4. Insert the other hand inside the membranes, with fingers spread out.					
5. Inspect the membranes for completeness.					
6. If membranes or placenta are not complete, take immediate action.					
7. Consult the woman about her cultural practices, and then dispose of the placenta according to national protocols.					

Practice checklist: AMTSL steps	Date				
	Rating				
<b>Making the woman comfortable</b>					
1. Rinse gloves with soap and water, if needed.					
2. Wash the woman's perineum, buttocks, and back gently and dry her with a clean, soft cloth.					
3. Place a clean cloth or pad on the woman's perineum.					
4. Remove soiled bedding and make the woman comfortable.					
5. Estimate and record blood loss.					
<b>Infection prevention and decontamination</b>					
1. While still wearing gloves, rinse outside surface of gloves with decontamination solution, then:					
• Dispose of gauze swabs and other waste materials in a leak-proof container or plastic bag.					
• Dispose of needles and sharps in a sharps-disposal container.					
• Clean apron with decontamination solution.					
• Place instruments in 0.5 percent chlorine solution for 10 minutes for decontamination.					
2. Immerse both gloved hands in 0.5 percent chlorine solution:					
• Remove gloves by turning them inside out.					
• If disposing of gloves, place in leak-proof container or plastic bag.					
• If reusing surgical gloves, submerge in 0.5% chlorine solution for 10 minutes to decontaminate.					
3. Wash hands thoroughly with soap and water and dry them.					
<b>Documentation</b>					
1. Record relevant details on the woman's record:					
• Time the baby is born.					
• Duration of third stage.					
• AMTSL details (including name of the provider, route and dosage of uterotonic drug used).					
<b>Care after placenta is delivered</b>					
1. If breastfeeding is the woman's choice for infant feeding, help the woman and baby to begin breastfeeding within one hour of birth.					
2. Monitor the woman at least every 15 minutes (more often if needed) during the first two hours after birth:					
• Palpate the uterus to check for firmness.					
• Massage the uterus until firm.					



Practice checklist: AMTSL steps	Date				
	Rating				
<ul style="list-style-type: none"> <li>• Check for excessive vaginal bleeding.</li> </ul>					
<ul style="list-style-type: none"> <li>• Ask the woman to call for help if bleeding increases or her uterus becomes soft.</li> </ul>					
<ul style="list-style-type: none"> <li>• If excessive bleeding is detected, take action to evaluate and treat PPH immediately.</li> </ul>					
3. Check the baby at the same time you check the mother—every 15 minutes for the first two hours after childbirth—to monitor:					
<ul style="list-style-type: none"> <li>• Baby’s breathing.</li> </ul>					
<ul style="list-style-type: none"> <li>• Baby’s color.</li> </ul>					
<ul style="list-style-type: none"> <li>• Warmth, by feeling the baby’s feet.</li> </ul>					
<ul style="list-style-type: none"> <li>• Bleeding at the cord site.</li> </ul>					
<ul style="list-style-type: none"> <li>• If a problem is detected, take action immediately.</li> </ul>					
4. Continue with normal care for the woman and newborn, including exclusive breastfeeding within the first 30 to 60 minutes, if this is the woman’s choice for infant feeding, and interventions for prevention of mother-to-child transmission of HIV/AIDS.					
5. Review possible danger signs with the woman and her family.					
6. Document all findings.					
7. Document all care provided.					





## Evaluation Checklist for Active Management of Third Stage of Labor

The facilitator or **clinical preceptor** will use the following checklist to evaluate participants’ performance (competency) of **AMTSL** on obstetric models and in the clinical area.

**Checklist directions**

Rate the performance of each step or task using the following rating scale:

**1** = Performs the step or task completely and correctly.

**0** = Unable to perform the step or task completely or correctly or the step/task was not observed.

**N/A (not applicable)** = Step was not needed.

<b>Evaluation Checklist: AMTSL</b>					
<b>Steps</b>	<b>Rating</b>				
<b>Date</b>					
<b>Evaluation type: model (M) or clinical practice (C)</b>					
<b>Emotional support (2 points)</b>					
1. Explains to the woman and her family what will happen.					
2. Provides emotional support and reassurance, and keeps the woman and her family informed throughout birth and during the immediate postpartum.					
<b>Points for skill/activity</b>					
<b>Preparation (6 points)</b>					
1. Prepares uterotonic drug (oxytocin is the uterotonic of choice) and other essential equipment for the birth before onset of second stage of labor.					
2. Wears a clean plastic or rubber apron, rubber boots, and eye goggles.					
3. Washes hands thoroughly with soap and water and dries them with a clean, dry cloth (or air-dries hands).					
4. Wears sterile surgical or HLD gloves on both hands.					
5. Asks the woman to empty her bladder when second stage is near (catheterizes only if the woman cannot urinate and bladder is full).					
6. Assists the woman to assume the position of her choice (squatting, semi-sitting).					
<b>Points for skill/activity</b>					
<b>Immediate newborn care (3 points)</b>					
1. Thoroughly dries the baby while assessing the baby’s breathing.					

Evaluation Checklist: AMTSL					
Steps	Rating				
2. If the baby is not crying or breathing at least 30 times per minute within 30 seconds of birth, <b>calls for help</b> and begins resuscitation.					
3. Places the baby in skin-to-skin contact with the mother and covers with a clean, dry cloth; covers head.					
<b>Points for skill/activity</b>					
<b>AMTSL step 1: Administration of a uterotonic drug (2 points)</b>					
1. Palpates the uterus to make sure no other baby is present.					
2. If no other baby is present, administers uterotonic drug (oxytocin 10 IU IM is the uterotonic of choice) within one minute of delivery (if a woman has an IV infusion, an option is giving oxytocin 5 IU IV bolus slowly).					
<b>Points for skill/activity</b>					
<b>AMTSL step 2: Controlled cord traction (9 points)</b>					
1. Clamps and cuts the cord approximately 2–3 minutes after the birth.					
2. Places the palm of the other hand on the lower abdomen just above the woman’s pubic bone.					
3. Keeps slight tension on the cord and awaits a strong uterine contraction.					
4. Applies gentle but firm traction to the cord during a contraction, while at the same time applying countertraction abdominally.					
5. Waits for the next contraction and repeats the action if the maneuver is not successful after 30–40 seconds of controlled cord traction.					
6. As the placenta delivers, holds it in both hands.					
7. Uses a gentle upward and downward movement or twisting action to deliver the membranes.					
8. If the <b>membranes tear</b> , gently examines the upper vagina and cervix.					
9. Places the placenta in the receptacle (e.g., kidney basin) provided.					
<b>Points for skill/activity</b>					



<b>Evaluation Checklist: AMTSL</b>					
<b>Steps</b>	<b>Rating</b>				
<b>AMTSL step 3: Uterine massage (4 points)</b>					
1. Immediately massages the fundus of the uterus through the woman’s abdomen until the uterus is contracted (firm).					
2. Ensures the uterus does not become relaxed (soft) after stopping uterine massage.					
3. If the uterus becomes soft after massage, repeats uterine massage.					
4. Teaches the woman how to massage her uterus.					
<b>Points for skill/activity</b>					
<b>Immediate postpartum care (7 points)</b>					
1. Inspects and repairs lacerations or tears (if necessary) of the lower vagina and perineum.					
2. Repairs episiotomy (if performed).					
3. Examines the maternal surface of the placenta and membranes for completeness and abnormalities.					
4. Disposes of the placenta.					
5. Removes soiled bedding and makes the woman comfortable.					
6. Estimates blood loss.					
7. If breastfeeding is the woman’s choice for infant feeding, assists the woman and baby to begin breastfeeding within the first hour after birth.					
<b>Points for skill/activity</b>					
<b>Infection prevention (6 points)</b>					
1. Before removing gloves, disposes of gauze swabs and other waste materials in a leak-proof container or plastic bag.					
2. Disposes of needles and sharps in a sharps disposal container.					
3. Cleans apron with decontamination solution.					
4. Places instruments in 0.5 percent chlorine solution.					
5. Decontaminates and disposes of gloves.					
6. Washes hands thoroughly with soap and water and dries them.					
<b>Points for skill/activity</b>					

<b>Evaluation Checklist: AMTSL</b>					
<b>Steps</b>	<b>Rating</b>				
<b>Care after placenta is delivered (5 points)</b>					
1. Monitors the woman at least every 15 minutes (more often if needed) during the first 2 hours after birth.					
2. Monitors the baby every 15 minutes for the first 2 hours after birth.					
3. Continues with normal care for the mother and newborn, including interventions for prevention of mother-to-child transmission of HIV/AIDS.					
4. Documents all findings.					
5. Documents all care provided.					
<b>Points for skill/activity</b>					
<b>A: Total points for case observed</b>					
<b>B: Total points that were N/A</b>					
<b>C: Total possible points for the case observed = 44 minus B</b>					
<b>Score = (A divided by C) multiplied by 100</b>					

# Job Aid: Active Management of the Third Stage of Labor (AMTSL)

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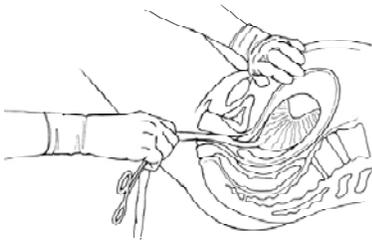
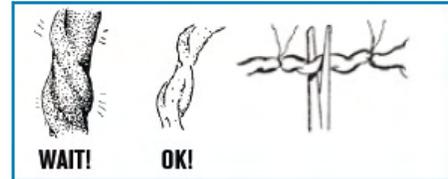
**1:** Dry the baby, assess the baby's breathing and perform resuscitation if needed, and place the baby in skin-to-skin contact with the mother

**2:** Place the infant directly on the mother's chest, prone, with the newborn's skin touching the mother's skin. Cover the baby's head with a cap or cloth.



**3:** Administer a uterotonic (the uterotonic of choice is oxytocin 10 IU IM) immediately after birth of the baby, and after ruling out the presence of another baby.

**4:** Clamp and cut the cord after cord pulsations have ceased or approximately 2-3 minutes after birth of the baby, whichever comes first.



**5:** Perform controlled cord traction while, at the same time, supporting the uterus by applying external pressure on the uterus in an upward direction towards the woman's head.

**6.** Massage the uterus immediately after delivery of the placenta membranes until it is firm.



During recovery, assist the woman to breastfeed if this is her choice, monitor the newborn and woman closely, palpate the uterus through the abdomen every 15 minutes for two hours to make sure it is firm and monitor the amount of vaginal bleeding. Provide PMTCT care as needed.





# Additional Topic 1: Infection Prevention Review

**105 min.**

## Summary

In this section, important infection prevention (IP) principles will be reviewed, focusing on handwashing, gloving, use of apron, use of needles, waste disposal, and the four steps for processing instruments and supplies. Understanding and using infection prevention practices is important to prevent major infections while providing care and to reduce the risk of transmitting serious diseases such as hepatitis B, hepatitis C, and HIV/AIDS to the woman and to staff, including those who clean up after childbirth.

Consider including some parts or the entire topic in any AMTSL training activities.

## Objectives

By the end of this topic, participants will be able to:

- Explain the five basic principles of IP practices.
- Describe ways to protect oneself and others from infection, focusing on handwashing; proper waste disposal; use of gloves, aprons, and other protective gear; and injection safety.
- Describe the four steps for decontaminating instruments.
- Explain how to mix a 0.5 percent chlorine decontamination solution.

## Materials/resources needed for the session

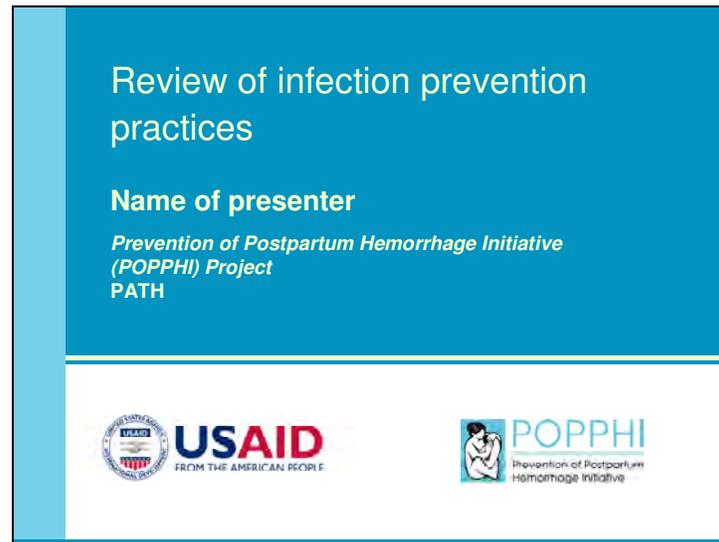
- Reference Manual, Participant's Notebook, and Facilitator's Guide.
- Flipchart, flipchart stand, markers, and flipchart tape.
- Water, 4-5 plastic containers to prepare a chlorine solution in, 4-5 measuring cups, and 4-5 bottles of chlorine (if possible get bottles with different concentrations of chlorine)

## Facilitator's Note

The goal of this session is to review IP principles and practices for providers who already have a basic understanding of them. Facilitators may need to add facility-specific information and visuals—for example, types of containers used for sharps, procedures for processing gloves, types of containers used for mixing and storing chlorine decontamination solution, and procedures for sterilization and high-level disinfection.

Facilitators should use their judgment regarding when in the workshop to teach this topic and how much content to include. For example, facilitators may decide to present information on IP just before the classroom or clinical practice sessions or as part of the orientation to the clinical site.

## Lesson Plan



### Flipchart / Overhead / PowerPoint slide 1

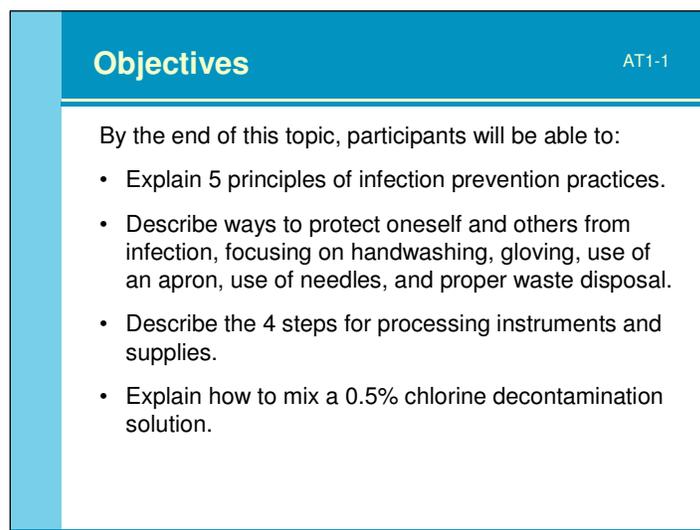
Time: 5 min.

#### Activities:

- Review objectives of the session.
- Present an overview of the session.

#### Notes to the facilitator:

- Introduce the session by presenting the objectives: read the objectives, briefly summarize or ask a participant to read them aloud.





## Flipchart / Overhead / PowerPoint slide 2

**Time:** 5 min.

**Activity:** Illustrated lecture.

**Objective:** Explain five principles of infection prevention practices.

### Notes to the facilitator:

- Begin the session by providing an illustrated lecture reviewing the principles of IP practices.
- Ask if participants have any questions before proceeding.

Principles of Infection Prevention Practices	AT1-2
<ul style="list-style-type: none"> <li>• Every person (client or staff) is considered potentially infectious.</li> <li>• Handwashing is the single most important practice for preventing cross-contamination.</li> <li>• Wear gloves before touching anything wet.</li> <li>• Use protective items (aprons, face masks, eye goggles) if splashes or spills of any body fluids are expected.</li> <li>• Use safe work practices.</li> </ul>	

## Flipchart / Overhead / PowerPoint slide 3

**Time:** 5 min.

**Activity:** Brainstorming to review recommendations for handwashing in the health care setting.

**Objective:** Describe ways to protect oneself and others from infection, focusing on handwashing, gloving, use of an apron, use of needles, and proper waste disposal.

Brainstorming	AT1-3
<p><b>When should health care providers wash their hands?</b></p>	

### Notes to the facilitator:

- Facilitate a brainstorming session to make a complete list of when providers need to wash their hands in health care settings. Complete the list from information in the section on handwashing in Additional Topic 1: Infection prevention in the **Reference Manual**.
- Emphasize the fact the providers need to wash their hands for 15–30 seconds for handwashing to be effective.

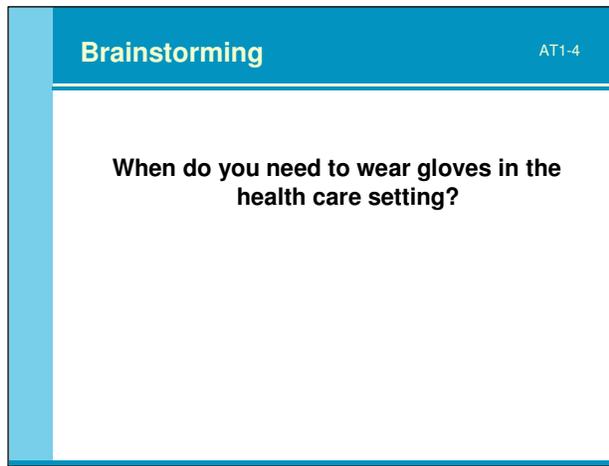
#### Flipchart / Overhead / PowerPoint slide 4

**Time: 5 min.**

**Activity:**

- Brainstorming to review recommendations for wearing gloves in the health care setting.
- Facilitated discussion to review difficulties in decontaminating, cleaning, and sterilizing or HLD processing of gloves.

**Objective:** Describe ways to protect oneself and others from infection, focusing on handwashing, gloving, use of an apron, use of needles, and proper waste disposal.



**Notes to the facilitator:**

- Facilitate a brainstorming session to make a complete list of when providers need to wear gloves in health care settings. Complete the list from information in the section on gloves in Additional Topic 1: Infection prevention in the **Reference Manual**.
- Emphasize the fact it is preferable to dispose of gloves after one use rather than trying to reuse them.
- Facilitate a discussion on difficulties in decontaminating, cleaning, and sterilizing or HLD processing of gloves.

- Remind participants of the dangers in using gloves that are cracked, peeling, or have visible tears or holes.

#### Flipchart / Overhead / PowerPoint slide 5

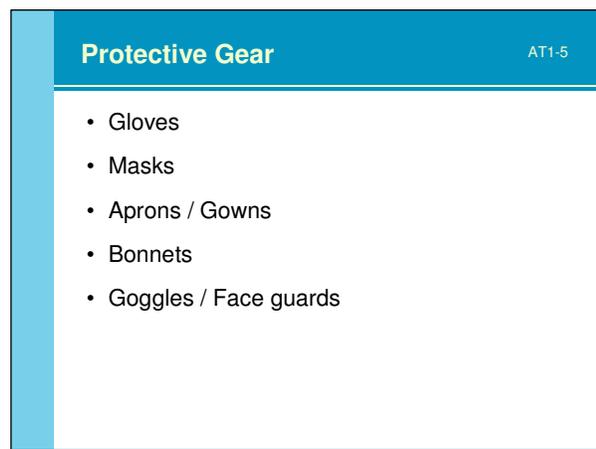
**Time: 5 min.**

**Activity:** Question-and-answer to review protective gear.

**Objective:** Describe ways to protect oneself and others from infection, focusing on handwashing, gloving, use of an apron, use of needles, and proper waste disposal

**Notes to the facilitator:**

- Present the flipchart with the different types of protective gear.
- Ask participants to describe:
  - Who (client or provider) is protected by each type of gear.
  - How each type of gear protects either the client or the provider.
- Ask participants which types of protective gear they use regularly at their worksites.



**Flipchart / Overhead / PowerPoint slide 6****Time: 5 min.****Activity:** Illustrated lecture to review handling sharp instruments.**Objective:** Describe ways to protect oneself and others from infection.**Notes to the facilitator:**

Handling sharp instruments	AT1-6
<ul style="list-style-type: none"><li>• Do not leave sharp instruments or needles (sharps) in places other than safe zones.</li><li>• Use a tray or basin to carry and pass sharp items.</li><li>• Pass instruments with the handle (not the sharp end) pointing toward the receiver.</li><li>• Tell other workers before passing sharps to another person.</li></ul>	

- Present an illustrated lecture on handling sharp instruments to prevent injuries in the workplace.
- Ask for questions before proceeding.

**Flipchart / Overhead / PowerPoint slide 7****Time: 5 min.****Activity:** Illustrated lecture to review ways to prevent accidental needle sticks.**Objective:** Describe ways to protect oneself and others from infection, focusing on handwashing, gloving, use of an apron, use of needles, and proper waste disposal.**Notes to the facilitator:**

- Present an illustrated lecture on preventing injuries in the workplace due to accidental needle sticks.

Preventing needle sticks	AT1-7
<ul style="list-style-type: none"><li>• Use each needle and syringe only once.</li><li>• Do not take needle and syringe apart after use.</li><li>• Do not recap, bend, or break needles before disposal.</li><li>• Dispose of needles and syringes in a puncture-proof container.</li></ul>	

## Flipchart / Overhead / PowerPoint slide 8

**Time: 5 min.**

**Activity:** Brainstorming to review how to minimize splashes.

**Objective:** Describe ways to protect oneself and others from infection when providing maternal and newborn care.

**Notes to the facilitator:**

BrainstormingAT1-8

How can health workers prevent / minimize splashes of blood or amniotic fluid when providing maternal and newborn care?

- Facilitate a brainstorming session to make a list of how to prevent splashes of blood and body fluids in health care settings. Complete the list from information in the section on preventing splashes in Additional Topic 1: Infection prevention in the **Reference Manual**.
- Review steps to take if blood or body fluids get in the provider's mouth, on the skin, or in the eyes.
- Finish this part of the session by emphasizing the fact that it is much easier to prevent exposure to viruses/microbes than to treat providers with post-exposure prophylaxis.

## Flipchart / Overhead / PowerPoint slide 9

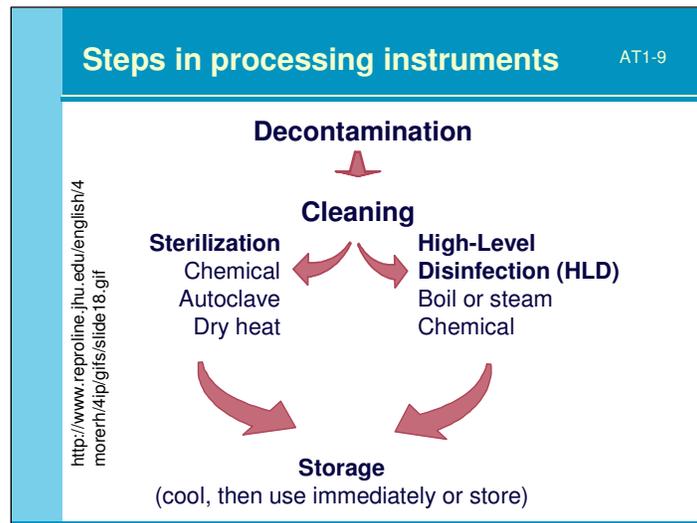
**Time: 10 min.**

**Activity:** Question-and-answer to review steps in processing.

**Objective:** Describe the 4 steps for processing instruments.

**Notes to the facilitator:**

- Present the diagram showing the four steps for processing instruments.
- Ask participants to refer to Table 6, Steps and benefits for processing instruments for reuse, in the **Reference Manual**.
- For each step, ask a volunteer to explain how the step helps to prevent infection.
- Ask a participant to briefly describe the difference between *high-level disinfected* and *sterile*.



**Flipchart / Overhead / PowerPoint slides 10, 11, and 12****Time: 15 min.****Activity:**

- Illustrated lecture to review preparation of a decontamination solution.
- Mini case studies to practice calculating how to prepare a 0.5% chlorine decontamination solution.

**Objective:** Explain how to mix a 0.5% chlorine decontamination solution.**Notes to the facilitator:**

- Present and explain how to prepare a 0.5% chlorine solution using liquid household bleach.
- Ask if there are questions.

**Preparing a 0.5% chlorine solution:  
Using liquid household bleach** AT1-10

- **[% chlorine in liquid bleach divided by 0.5%] minus 1 = parts of water for each part bleach**  
**Example:** To make a 0.5% chlorine solution from a 3.5% chlorine concentrate, you must use 1 part chlorine and 6 parts water:  
 $[3.5\% \text{ divided by } 0.5\%] \text{ minus } 1 = [7] \text{ minus } 1 = 6 \text{ parts water for each part chlorine}$

Water Water Water Water Water Water  
Chlorine

EngenderHealth. Online course for Infection Prevention. Available at: [www.engenderhealth.org/IP/instrum/in4a.html](http://www.engenderhealth.org/IP/instrum/in4a.html). Accessed April 2, 2007

**Notes to the facilitator:**

**Mini Case Studies** AT1-11

- Calculate the appropriate dilution to prepare a 0.5% chlorine solution using each of the chlorine preparations below:

Chlorine Preparation	Parts Water	Parts Chlorine
2.4%		
5%		
15%		

- Give participants 5 minutes to calculate how to prepare a 0.5% chlorine solution with the chlorine preparations provided in the mini case studies.
- Then ask volunteers to explain how to prepare a 0.5% chlorine decontamination solution using each of the different preparations.

**Notes to the facilitator:**

- The answers for the calculations are on the slide (also refer to Table 7. Mixing a 0.5 percent chlorine decontamination solution in the **Reference Manual**).
- After going through the calculations, divide the participants into groups of 3-4 people. Give each group a bottle of chlorine, an empty plastic container, and a measuring cup. Ask each group to prepare a 0.5% chlorine solution with the chlorine they were given.

**ANSWERS** AT1-12

Chlorine Preparation	Parts Water	Parts Chlorine
2.4%	4 parts water	1 part bleach
5%	9 parts water	1 part bleach
15%	29 parts water	1 part bleach

**Flipchart / Overhead / PowerPoint slides 13, 14 and 15****Time: 10 min.****Activity:**

- Illustrated lecture to review preparation of a decontamination solution.
- Mini case studies to practice calculating how to prepare a 0.5% chlorine decontamination solution.

**Objective:** Explain how to mix a 0.5% chlorine decontamination solution using bleach powder.

**Notes to the facilitator:**

- Present and explain how to prepare a 0.5% chlorine solution using bleach powder.
- Ask if there are questions.

**Preparing a 0.5% chlorine solution:  
Using bleach powder** AT1-13

- **[% chlorine desired divided by % chlorine in bleach powder] times 1000 = Grams of powder for each liter of water**
- **Example:** To make a 0.5% chlorine solution from calcium hypochlorite powder containing 35% available chlorine:  
**[0.5% divided by 35%] times 1000 = [0.0143] times 1000 = 14.3**  
Therefore, you must dissolve 14.3 grams of calcium hypochlorite powder in 1 liter of water in order to get a 0.5% chlorine solution.

**Notes to the facilitator:**

**Mini Case Studies** AT1-14

Calculate the appropriate dilution to prepare a 0.5% chlorine solution using each of the chlorine preparations below :

Preparation	% Active Chlorine	Gms / Liter
Calcium hypochlorite	70%	
Calcium hypochlorite	35%	

- Give participants 5 minutes to go through the calculations.
- Then ask volunteers to explain how to prepare a 0.5% chlorine decontamination solution using each of the different preparations.

**Notes to the facilitator:**

- The answers for the calculations are on the slide (also refer to Table 7. Mixing a 0.5 percent chlorine decontamination solution in the **Reference Manual**).

**Preparing a 0.5% chlorine solution: Answers** AT1-15

Preparation	% Active Chlorine	Gms / Litre
Calcium hypochlorite	70%	7.1 grams per liter
Calcium hypochlorite	35%	14.2 grams per liter



## Flipchart / Overhead / PowerPoint slide 16

Time: 30 min.

### Activities:

- Summary.
- Review content by playing the IP interactive knowledge game.

Interactive Game: Infection Prevention (IP) knowledge interactive game
AT1-16

Turn to classroom learning activities for Additional Topic 1: Infection Prevention in the **Participant's Notebook**.



### Notes to the facilitator:

- Refer to the following pages of the **Facilitator's Guide** for instructions on how to play this game. Refer to the pages following instructions for the game to find answers to the questions. The questions, without the answers, are located in the **Participant's Notebook**.

## Flipchart / Overhead / PowerPoint slide 17

### Notes to the facilitator:

- Encourage participants to work on learning activities found in the **Participant's Notebook** for Additional Topic 1.
- Participants may work individually or in groups on the learning activities during breaks, in the evening, or in the clinical area when there are no clients.
- Participants may correct their learning activities by referring to suggested answers found in the **Participant's Notebook**. Facilitators should make themselves available to work with the participants to review answers for learning activities.

Learning activities
AT1-17

- Please complete learning activities found in the **Participant's Notebook** for Additional Topic 1.
- You may work individually or in groups on the learning activities during breaks, in the evening, or in the clinical area when there are no clients.
- You may correct your answers individually or with another participant or the facilitator.
- See a facilitator if you have questions.

## Infection Prevention (IP) knowledge interactive game

<b>Purpose</b>	To present basic information on IP in an easy and enjoyable way while allowing participants an opportunity to demonstrate what they know.
<b>Duration</b>	<b>30 minutes</b>
<b>Introduction</b>	<p>Set up round tables that will accommodate 4–6 participants at each table. Divide the group into two to four teams of equal size, depending on the size of the group and the amount of time you have. The more teams there are, the longer the game will take.</p> <p>Distribute the groups somewhat evenly by discipline, so that each group has the same number of nurses, doctors, and so on. Number the teams 1, 2, 3, and 4 and ask the participants to sit with their teams.</p> <p>Prepare a flipchart that has a circle divided into 6 parts for each team. Write a team’s number on top of each circle.</p> <p>Start the exercise by explaining that the objective is to be the first team to complete the circle. Each team can fill in one-sixth of the circle each time the team gets a correct answer in six of the following categories:</p> <ul style="list-style-type: none"> <li>▪ Handwashing</li> <li>▪ Protective gear</li> <li>▪ Handling sharps</li> <li>▪ Preventing splashes</li> <li>▪ Waste disposal</li> <li>▪ Instrument processing</li> </ul> <p>Ask participants to turn to classroom learning activities for Additional Topic 1: Infection Prevention in the <b>Participant’s Notebook</b> that has a copy of the questions without the answer key.</p>
<b>Activities</b>	<p>Give the participants 15–20 minutes to answer the questions, working together in their teams.</p> <p>Remind the teams to record their answers on the question sheet. Suggest that they keep the answers simple and not linger on any one question.</p> <p>To begin play, the first team chooses a category and a question, then reads the question aloud and gives the answer. The team has 10 seconds to answer.</p> <p>If correct, the team colors in one-sixth of its circle and records next to the circle the name of the category from which the question came.</p> <p>A team may only answer one question per category.</p>



## Infection Prevention (IP) knowledge interactive game

	<p>If incorrect, the next team gets to answer that question or another question of its choosing.</p> <p>Once a team correctly answers a question, no other team may use it. The facilitator should clarify any misconceptions that may have surfaced during the discussion once a team has answered a question. The next team takes a turn.</p> <p><b><i>The first team to fill its circle by coloring in all six pieces (representing six correct answers in six different categories) is the winner and receives the prize.</i></b></p>
<b>Debriefing</b>	<p>Point out that each participant brings a great deal of knowledge and expertise to the training activity and that by working together, they are able to respond correctly to many of the IP questions in the Knowledge Game.</p>

## Answers to IP Knowledge Game

### Category 1: Handwashing

For each practice or situation described below, select whether it is an acceptable or unacceptable handwashing practice.

Practice	Answer (circle one)
1. A doctor washes his hands by dipping them in a basin of water before examining a patient.	<b>Unacceptable: Hands can be contaminated by dipping them in a basin of water. Standing water can easily become contaminated even if antiseptic is added.</b>
2. If there is no running water at a clinic, one staff member pours water over the other's hands for handwashing.	<b>Acceptable: If there is no running water, this practice is an acceptable substitute, as long as the water being poured is clean.</b>
3. A large bar of soap is kept in a saucer for use by all personnel in the examination room.	<b>Unacceptable: Small pieces of soap kept in a dish that allows drainage are best. A large bar of soap in a dish with no drainage can become contaminated easily.</b>
4. Staff members wash their hands for approximately five seconds.	<b>Unacceptable: Staff must wash their hands for 10–15 seconds.</b>
5. A staff member arrives at the clinic to find many people waiting for her, so she immediately begins seeing clients without washing her hands.	<b>Unacceptable: Staff should wash their hands when they arrive and before they leave a health facility.</b>



## Category 2: Protective gear

For each practice or situation described below, select whether it is an acceptable or unacceptable infection prevention practice.

Practice	Answer (circle one)
1. Put gloves in the labor room sink after use.	<b>Unacceptable: Gloves should be decontaminated immediately after use and then cleaned and high level disinfected or sterilized.</b>
2. Rub the fundus after delivery of the placenta without using gloves.	<b>Unacceptable: The woman's abdomen can be contaminated by body fluids and blood during countertraction and skin-to-skin contact with the newborn and exam gloves should be worn to protect the provider.</b>

In the space provided, circle *true* or *false* for each statement.

3. Protective gear should be worn when handling a baby after delivery, before the infant is bathed.	<b>True</b>
4. Gloves provide a barrier against possible infectious microorganisms that can be found in blood, other body fluids, and waste.	<b>True: Gloves act as a barrier.</b>
5. Even when gloves are decontaminated, cleaned, and high level disinfected, they should not be used if there are holes in them.	<b>True</b>

### Category 3: Handling sharps

In the space provided, circle *true* or *false* for each statement.

Practice	Answer (circle one)
1. Injuries with sharp objects occur when sharps are left on surgical drapes or bed linens.	<b><i>True: Sharp objects left on drapes or bed linen can cause injuries.</i></b>
2. To reduce the risk of a needlestick, recap a needle by holding the syringe in one hand and holding the needle in the other hand.	<b><i>False: You should avoid recapping needles.</i></b>
3. Housekeeping staff are rarely at risk of injury or infections caused by sharps—such as hypodermic needles or scalpel blades—because they are not directly involved in client-care activities.	<b><i>False: Housekeeping staff are often at risk of injury or infection by sharps.</i></b>

For each of the practices described below, select whether it is an acceptable or unacceptable infection prevention practice:

4. Break a hypodermic needle before disposal.	<b><i>Unacceptable: Providers are at risk when breaking a needle after using it and before disposal. Sharps can cause injury and transmission of serious infections, including HIV and hepatitis B.</i></b>
5. Wash a needlestick or cut with soap and water.	<b><i>Acceptable: A needlestick or cut may be washed with soap and water.</i></b>



### Category 4: Preventing splashes

For each practice or situation described below, select whether it is an acceptable or unacceptable infection prevention practice.

Practice	Answer (circle one)
1. The provider drops instruments into a bucket with decontamination solution to avoid contact with the solution.	<b><i>Unacceptable: Place items in the decontamination bucket without splashing the solution.</i></b>
2. The provider artificially ruptures membranes during a contraction to prevent splashes.	<b><i>Unacceptable: Avoid rupturing membranes during a contraction to prevent splashes.</i></b>
3. Irrigate eyes well with water when blood or body fluids splash in them.	<b><i>Acceptable</i></b>
4. If you accidentally get blood or body fluids on your hands, wash with a 0.5 percent chlorine solution.	<b><i>Unacceptable: If blood or body fluids get in your mouth or on your skin, wash with plenty of water and soap as soon as it is possible and safe for the woman and baby. Chlorine is very abrasive and can cause small wounds on your hands which increase your risk of exposure to blood-borne pathogens.</i></b>
5. Hold contaminated instruments under the water while scrubbing.	<b><i>Acceptable: Holding instruments and other items under the surface of the water while scrubbing and cleaning will help prevent splashing.</i></b>

## Category 5: Waste disposal

In the space provided, circle *true* or *false* for each statement.

Practice	Answer
1. Everyone who handles medical waste—from the point generated until final disposal—is at risk of infections and injury.	<b><i>True: A large percentage of staff report having experienced waste-related injuries and infection.</i></b>
2. If medical waste is stored at the health facility before being burned, it can be placed in a pile behind the clinic.	<b><i>False: Place waste in a container in a closed area that is minimally accessible, and make sure all containers have lids.</i></b>
3. Liquid medical waste can be disposed down a sink, drain, toilet, or latrine.	<b><i>True: If this is not possible, bury it along with solid medical waste.</i></b>
4. Burial sites for medical waste should not be located near water sources because of the potential to contaminate the water.	<b><i>True</i></b>
5. Scavenging of medical waste is rarely a problem in low-resource settings.	<b><i>False</i></b>



## Category 6: Instrument processing

In the space provided, circle *true* or *false* for each statement.

Practice	Answer (circle one)
1. Decontamination kills all microorganisms on soiled instruments and other items.	<b><i>False: Decontamination kills viruses such as HIV and many—but not all—other microorganisms.</i></b>
2. When preparing a chlorine solution for decontamination, it is important to know the amount of active chlorine in the product used.	<b><i>True: It is important to know the amount of active chlorine in order to make a solution of the correct strength for decontamination.</i></b>
3. Cleaning instruments before sterilizing them is not necessary if they were soaked in a 0.5 percent chlorine solution for 10 minutes.	<b><i>False: Although decontamination makes items safer to handle, cleaning is still necessary to remove organic material, dirt, and other matter that can interfere with further processing.</i></b>
4. Sterilizing may not be effective if blood and other organic material are not cleaned from instruments before sterilizing.	<b><i>True: It is important to clean items before sterilization; microorganisms trapped in blood and other matter can survive the sterilization process.</i></b>
5. High-level disinfection kills all microorganisms.	<b><i>False: High-level disinfection does not reliably kill all bacterial endospores.</i></b>





## **Additional Topic 2: Birth Preparedness and Complication Readiness**

**45 min.**

### **Summary**

The following session discusses how to develop a birth-preparedness plan (BPP) and a Complication-Readiness Plan (CRP). Because all pregnancies are at risk for complications, providers must work with all pregnant women and their families to develop a BPP which will help ensure that women receive high-quality, timely care for both normal and complicated pregnancy, labor, and childbirth.

### **Objectives**

After completing this session, participants will be able to:

- Identify the components of the BPP and the CRP.
- Describe how preparation of these plans can prevent maternal and newborn deaths.

### **Materials/resources needed for the session**

- Reference Manual, Participant's Notebook, and Facilitator's Guide.
- Flipchart, flipchart stand, markers, and flipchart tape.

### **Facilitator's Note**

This topic is not part of the core curriculum, but facilitators may choose to add it to the Prevention of Postpartum Hemorrhage training program if there is a particular need or interest in the country to have a session on developing birth-preparedness and complication-readiness plans.

## Lesson Plan



### Flipchart / Overhead / PowerPoint slide 1

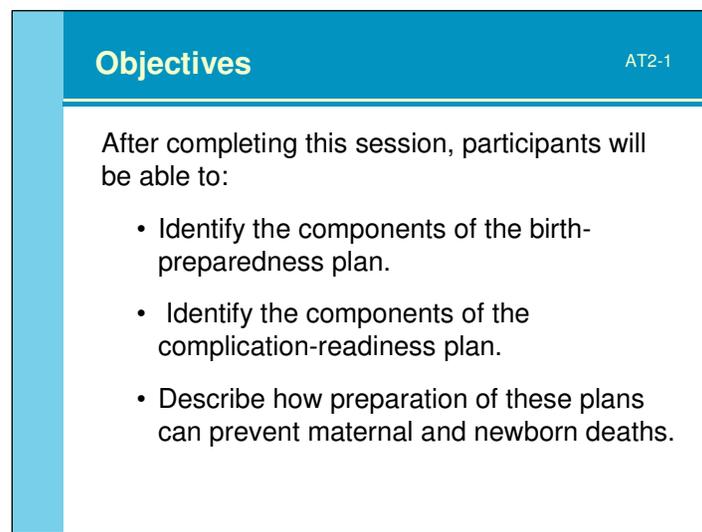
Time: 5 min.

#### Activities:

- Review objectives of the session.
- Present an overview of the session.

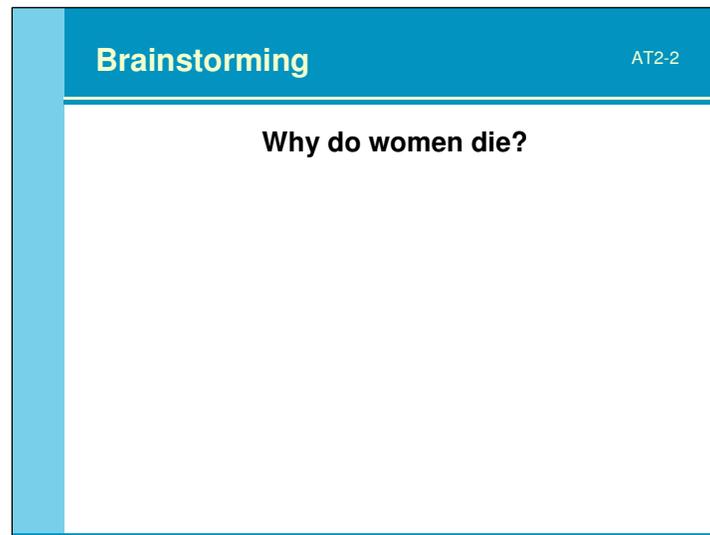
#### Notes to the facilitator:

- Introduce the session by presenting the objectives: read the objectives, briefly summarize, or ask a participant to read them aloud.



**Flipchart / Overhead / PowerPoint slide 2****Time: 5 min.****Activity:** Question-and-answer to review reasons why women die from pregnancy-related complications.**Notes to the facilitator:**

- Ask participants to list the reasons why women and newborns do not receive timely, high-quality care and how this affects mortality. Write the findings on a flipchart and complete the list with the following information.
- The factors that prevent women from getting the lifesaving health care they need include:
  - Distance from health services;
  - Cost (direct fees as well as the cost of transportation, drugs, and supplies);
  - Multiple demands on women's time;
  - Women's lack of decision-making power within the family;
  - Poor quality services, including poor treatment by health providers, which makes women reluctant to use services.



### Flipchart / Overhead / PowerPoint slide 3

**Time: 10 min.**

**Activity:** Illustrated lecture to explain the four delays in receiving lifesaving health care.

#### **Notes to the facilitator:**

- Explain that the factors that prevent women from getting the lifesaving health care have been translated into the following delays:
  - **Delay in recognizing the problem:** When a woman experiences a danger sign, she must recognize that she is experiencing a problem. If pregnant women, their families, and women caring for them do not know the danger signs that indicate the woman is experiencing a complication, they will not know when they need to seek care.
  - **Delay in deciding to seek care:** When a problem arises, the woman and her family have to decide to seek care. If the primary decision-maker is not present, it may mean that the woman is not allowed to seek care, or seeking care is delayed.
  - **Delay in arriving at the appropriate facility:** Once the woman, family, and partner make a decision to seek care, they must find a means of transport and the necessary funds to go to the appropriate facility. If there is no means of transport and/or the woman and her family do not have the necessary funds, the woman will not seek care in a timely fashion.
  - **Delay in receiving high-quality care:** Once the woman has reached the appropriate level, she must receive high-quality care for whatever obstetric emergency she has suffered. If the care she receives is not high-quality or appropriate care, then the woman will have reached the appropriate facility in vain.

The slide features a blue header with the title 'Four Delays' on the left and the code 'AT2-3' on the right. Below the header, a white box contains a bulleted list of the four delays.

Four Delays	AT2-3
<ul style="list-style-type: none"><li>• Delay in recognizing the problem</li><li>• Delay in deciding to seek care</li><li>• Delay in arriving at the appropriate facility</li><li>• Delay in receiving quality care</li></ul>	

**Flipchart / Overhead / PowerPoint slides 4 and 5****Time: 10 min.****Activity:** Question-and-answer and illustrated lecture to describe elements of the birth-preparedness plan.**Objective:** Identify the components of the birth-preparedness plan.**Notes to the facilitator:**

- Ask participants to describe what they do to assist women and their families to prepare for birth during antenatal visits.
- Write the findings on a flipchart and complete the list with the information on preparing a birth-preparedness plan found in Additional Topic 2: Birth preparedness and complication readiness in the **Reference Manual**.

Brainstorming	
	AT2-4
<b>How do you assist women and their families to prepare for birth?</b>	

**Notes to the facilitator:**

- Present information on elements of a birth-preparedness plan using information found in Additional Topic 2: Birth preparedness and complication readiness in the **Reference Manual**.

Elements of a birth-preparedness plan	
	AT2-5
<ul style="list-style-type: none"><li>• Make plans for the birth.</li><li>• Decide birth plan issues.</li><li>• Prepare what is needed for birth.</li><li>• Save money.</li></ul>	

## Flipchart / Overhead / PowerPoint slides 6 and 7

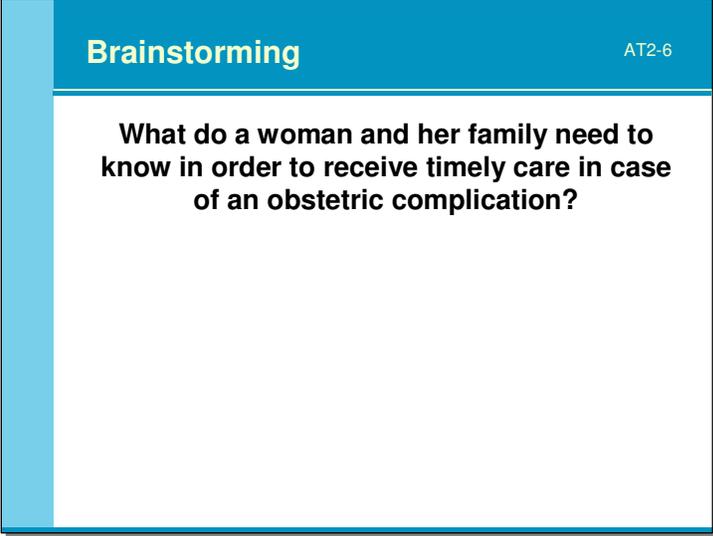
**Time: 10 min.**

**Activity:** Brainstorming and illustrated lecture to describe elements of the complication-readiness plan.

**Objective:** Identify the components of the complication-readiness plan.

### Notes to the facilitator:

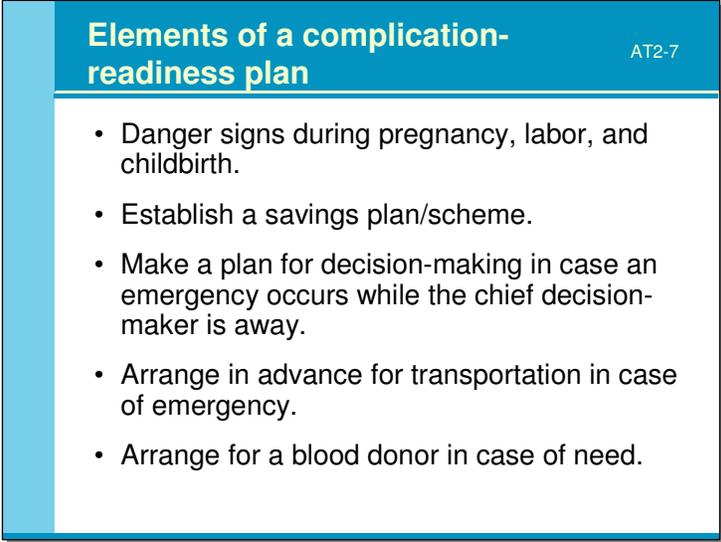
- Ask participants to describe what they do to assist women and their families to prepare for any complications that may occur during pregnancy, childbirth, in the immediate postpartum, and for the newborn.
- Write the findings on a flipchart and complete the list with the information on preparing a complication-readiness plan found in Additional Topic 2: Birth preparedness and complication readiness in the **Reference Manual**.



A slide titled "Brainstorming" with the code "AT2-6" in the top right corner. The main text asks: "What do a woman and her family need to know in order to receive timely care in case of an obstetric complication?"

### Notes to the facilitator:

- Present information on elements of a complication-readiness plan using information found in Additional Topic 2: Birth preparedness and complication readiness in the **Reference Manual**.



A slide titled "Elements of a complication-readiness plan" with the code "AT2-7" in the top right corner. The slide lists five key elements:

- Danger signs during pregnancy, labor, and childbirth.
- Establish a savings plan/scheme.
- Make a plan for decision-making in case an emergency occurs while the chief decision-maker is away.
- Arrange in advance for transportation in case of emergency.
- Arrange for a blood donor in case of need.

**Flipchart / Overhead / PowerPoint slide 8****Time: 5 min.****Activity:** Summary.**Notes to the facilitator:**

- Review the most important points of the session. Involve participants as much as possible in the summary.
- Emphasize that preparation of birth-preparedness and complication-readiness plans can:
  - **Prevent PPH.** If the woman gives birth with a skilled attendant, she can benefit from interventions that prevent PPH, such as monitoring labor using a partograph, AMTSL, etc.

AND

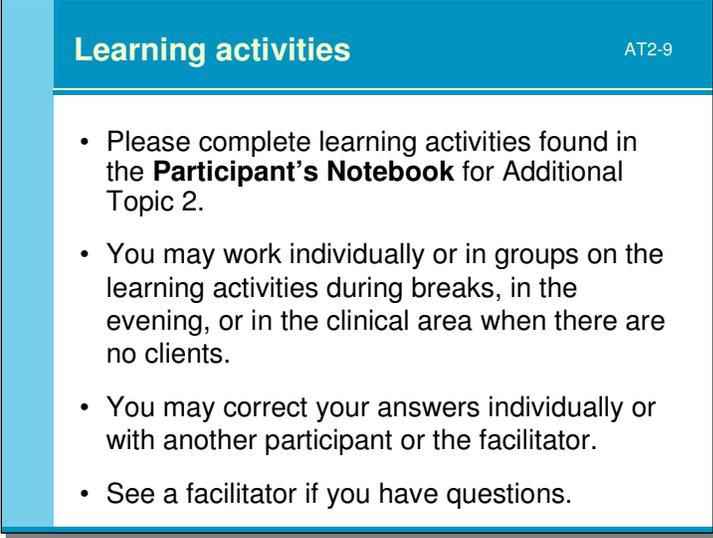
- **Prevent deaths due to PPH.** If the woman gives birth with a skilled attendant, she can benefit from close monitoring during the immediate postpartum, which will assist in early diagnosis of PPH, and will be treated by a skilled attendant who can appropriately manage PPH.

Summary		AT2-8
Preparation of birth-preparedness and complication-readiness plans can:		
1) prevent PPH		
AND		
2) prevent deaths due to PPH		

## Flipchart / Overhead / PowerPoint slide 9

### Notes to the facilitator:

- Encourage participants to work on learning activities found in the **Participant's Notebook** for Additional Topic 2.
- Participants may work individually or in groups on the learning activities during breaks, in the evening, or in the clinical area when there are no clients.
- Participants may correct their learning activities by referring to suggested answers found in the **Participant's Notebook**. Facilitators should make themselves available to work with the participants to review answers for learning activities.



**Learning activities** AT2-9

- Please complete learning activities found in the **Participant's Notebook** for Additional Topic 2.
- You may work individually or in groups on the learning activities during breaks, in the evening, or in the clinical area when there are no clients.
- You may correct your answers individually or with another participant or the facilitator.
- See a facilitator if you have questions.



## Additional Topic 3: Management of selected complications during the third stage of labor

5 hours

### Summary

This section provides some guidance on how to manage the most common problems that may occur during the third stage of labor. It is very rare for problems to happen if AMTSL is performed correctly. However, some problems may happen regardless of how the birth attendant manages the third stage of labor. If problems occur, providers must recognize and manage them.

### Objectives

By the end of this topic, participants will be able to describe the immediate medical management of the following complications that may occur during the third stage of labor:

- The woman begins to bleed excessively after childbirth.
- The woman is in shock.
- The uterus does not contract adequately.
- There are genital tears.
- There is a cervical tear.
- The placenta is retained.
- The cord tears off (ruptured cord) during controlled cord traction.
- The uterus inverts.

### Materials/resources needed for the session

- Reference Manual, Participant's Notebook, and Facilitator's Guide.
- Flipchart, flipchart stand, markers, and flipchart tape.
- Obstetric and newborn models, two cloths for the newborn, one cloth for the woman's abdomen, delivery kit (one pair of scissors, two clamps), and cord ties or clamps.
- Infection prevention equipment and supplies: protective gear, bucket, chlorine, water, gloves, soap, towels, and waste bin.
- Oxytocin, syringe, needle, and sharps disposal box.
- Light source.
- Blood pressure machine, stethoscope, thermometer, and wall clock.
- Bedpan, urinary catheter, and test tube.
- Material for starting an IV, IV pole, and compresses.

### Facilitator's Note

This topic is not part of the core curriculum, but facilitators may choose to add it to the Prevention of Postpartum Hemorrhage training program if there is a particular need or interest in the country to have a session on management of complications that may occur during the third stage of labor. The steps for management are based on recommendations from the World Health Organization. Facilitators will need to compare these protocols to national protocols for management of obstetric emergencies and, where needed, adapt them to the local context.

Evidence has confirmed that these problems are NOT caused by AMTSL (if it is implemented properly), but may happen just before, during, or just after third stage.

## Lesson Plan

Management of selected complications during the third stage of labor

Name of presenter

*Prevention of Postpartum Hemorrhage Initiative (POPHI) Project*  
PATH

 **USAID**  
FROM THE AMERICAN PEOPLE

 **POPHI**  
Prevention of Postpartum Hemorrhage Initiative

### Flipchart / Overhead / PowerPoint slide 1

**Time: 5 min.**

#### Activities:

- Review objectives of the session.
- Present an overview of the session.

#### Notes to the facilitator:

- Introduce the session by presenting the objectives: read the objectives, briefly summarize, or ask a participant to read them aloud.

**Objectives** AT3-1

By the end of this topic, learners will be able to describe the immediate medical management of the following complications that may occur during the third stage of labor:

- The woman begins to bleed excessively after childbirth.
- The woman is in shock.
- The uterus does not contract adequately.
- There are genital tears.
- There is a cervical tear.
- The placenta is retained.
- The cord tears off (ruptured cord) during controlled cord traction.
- The uterus inverts.

**Flipchart / Overhead / PowerPoint slide 2****Time: 5 min.****Activity:** Illustrated lecture to review the principles to follow when managing an obstetric emergency.**Notes to the facilitator:**

- Begin the session by reviewing the principles of care when providing care to a woman experiencing an obstetric complication.

<b>Principles for management of obstetric emergencies</b>	
	AT3-2
<ol style="list-style-type: none"><li>1. It is impossible to predict which women will have an obstetric emergency.</li><li>2. The rapidness of the diagnosis will influence the outcome for the woman experiencing a complication.</li><li>3. The responsibility of the birth attendant is to:<ul style="list-style-type: none"><li>• Put the initial steps of emergency care into practice and</li><li>• Ensure that the woman receives further care as soon as possible by the most appropriate health care provider.</li></ul></li></ol>	

### Flipchart / Overhead / PowerPoint slide 3

Time: 15 min.

#### Activities:

- Illustrated lecture to present immediate management in the case of an obstetric emergency.
- Simulation of immediate management in the case of an obstetric emergency.

#### Notes to the facilitator:

- Present the flipchart/slide describing immediate management of an obstetric emergency (if possible, perform a simulation of the steps). Ask participants to turn to the job aid for immediate management of an obstetric emergency found in Additional Topic 3: Managing complications during the third stage of labor in the **Participant's Notebook**. Review the first steps in management of an obstetric emergency.
- Explain the purpose of each of the steps in general management:
  - **Shout for help:** Management of any emergency requires that many health care providers work together to do all of the necessary steps.
  - **Initial rapid evaluation** assists the provider in making a decision to treat the woman for shock and provides a baseline for evaluation of any treatment provided.
  - **Starting an IV infusion** will ensure that the woman has an IV line for perfusing medications or fluids before her veins collapse.
  - **Begin specific evaluation and management for the obstetric emergency.** Any management should be based on a clear identification of the problem being treated.
- Ask for questions before proceeding.

Immediate management in case of an obstetric emergency	
	AT3-3
<ol style="list-style-type: none"><li>1. <b>SHOUT FOR HELP.</b></li><li>2. Urgently mobilize all available personnel.</li><li>3. Rapidly evaluate vital signs (pulse, blood pressure, respiration, temperature).</li><li>4. Start an IV infusion (two if possible) using a large-bore (16-gauge or largest available) cannula or needle. Collect blood just before infusion of fluids. Rapidly infuse IV fluids.</li><li>5. <b>Begin specific evaluation and management for the obstetric emergency.</b></li></ol>	

**Flipchart / Overhead / PowerPoint slides 4 and 5****Time: 5 min.****Activity:** Illustrated lecture to present signs and symptoms of shock.**Notes to the facilitator:**

- Present the flipchart/slide listing the most common signs and symptoms of shock.

Symptoms and signs of shock that are usually present: <span style="float: right;">AT3-4</span>	
<ul style="list-style-type: none"><li>• Fast, weak pulse (110 per minute or more)</li><li>• Low blood pressure (systolic less than 90 mm Hg)</li></ul>	

**Notes to the facilitator:**

- Present the flipchart/slide listing other signs and symptoms of shock.

Other symptoms and signs of shock include: <span style="float: right;">AT3-5</span>	
<ul style="list-style-type: none"><li>• Pallor (especially of inner eyelid, palms or around mouth)</li><li>• Wwheatiness or cold clammy skin</li><li>• Rapid breathing (rate of 30 breaths per minute or more)</li><li>• Anxiousness, confusion, or unconsciousness</li><li>• Scanty urine output (less than 30 mL per hour)</li></ul>	

## Flipchart / Overhead / PowerPoint slides 6, 7, 8, and 9

**Time: 15 min.**

**Activity:** Mini case studies to review signs and symptoms of shock.

### Notes to the facilitator:

- Ask participants to refer to classroom learning activity 1: Assessing shock for Additional Topic 3: Managing complications during the third stage of labor in the **Participant's Notebook**.
- Ask a participant to read the case study aloud, then ask participants to decide if the woman is in shock or not.
- Ask participants to provide an explanation for their response. Facilitate a discussion if not all of the participants had the same answers.
- Complete as many of the mini case studies as possible.

Mini case studies (Classroom learning activity 1: Assessing shock) <span style="float: right;">AT3-6</span>
<ul style="list-style-type: none"><li>• Ms. A gave birth at home about 4 hours ago. She has come to your health center because she has heavy vaginal bleeding. Vital signs: Pulse: 96 beats/min; BP: 110/70; Respirations: 21/min; Temperature: 37°C; her conjunctivae are pale; her extremities are warm; she is conscious; she just passed a "large amount" of urine.</li></ul>

- Correct answer: Ms. A is not in shock.

- Correct answer: Ms. B is in shock.

Mini case studies (Classroom learning activity 1: Assessing shock) <span style="float: right;">AT3-7</span>
<ul style="list-style-type: none"><li>• You assisted Ms. B during childbirth. Labor was prolonged and she received an IV drip of oxytocin to augment uterine contractions. Ms. B gave birth soon after the IV was started and you did AMTSL. Thirty minutes after delivery of the placenta, Ms. B is still bleeding heavily. Vital signs: Pulse: 112 beats/min; BP: 80/40; Respirations: 36/min; Temperature: 36°C; her conjunctivae are pale; her extremities are cold; Ms. B is very anxious; you can't remember when she last passed urine.</li></ul>



**Mini case studies**  
**(Classroom learning activity 1: Assessing shock)**

AT3-8

- Ms. C is 38 weeks pregnant. She has come to the health center because she is having vaginal bleeding, severe abdominal pain, and she thinks she is in labor. Vital signs: Pulse: 82 beats/min; BP: 130/90; Respirations: 24/min; Temperature: 37,5°C; Fetal heart tones: absent; her conjunctivae are pale; her extremities are cold; Ms. C is very anxious; she can't remember when she last passed urine.

- Correct answer: Ms. C is not in shock.

- Correct answer: Ms. D is in shock.
- Remind participants that an early diagnosis of obstetric emergencies will only be possible if health care providers closely monitor the woman during labor, childbirth, and immediately after giving birth.

**Mini case studies**  
**(Classroom learning activity 1: Assessing shock)**

AT3-9

- Ms. D gave birth in the health center last night. When you are doing rounds, you find: Vital signs: Pulse: 132 beats/min; BP: 70/-; Respirations: 32/min; Temperature: 36°C; her conjunctivae are pale; Ms. D is confused and has cold, clammy skin; she last urinated before giving birth.

## Flipchart / Overhead / PowerPoint slides 10 and 11

Time: 15 min.

### Activities:

- Illustrated lecture to present general management of shock.
- Simulation of general management of shock.

**Objective:** Describe the immediate medical management if the woman presents with shock.

### Notes to the facilitator:

- Present the flipchart describing general management of shock (if possible, perform a simulation of the steps). Ask participants to turn to job aids found in the **Participant's Notebook** to review the algorithm for immediate management of shock.
- Explain the importance of each step:
  - **Shout for help:** Management of any emergency requires that many health care providers work together to do all of the necessary steps.
  - **Initial rapid evaluation** assists the provider in making a decision to treat the woman for shock and also provides a baseline for evaluation of any treatment provided.
  - **Turn the woman onto her side** to minimize the risk of aspiration if she vomits and to ensure that an airway is open.
  - **Keep the woman warm but do not overheat her**, as this will increase peripheral circulation and reduce blood supply to the vital centers.
  - **Elevate the legs** to increase return of blood to the heart (if possible, raise the foot end of the bed).

### Immediate management of shock

(Slide 1 / 2) AT3-10

- 1. SHOUT FOR HELP.**
2. Urgently mobilize all available personnel.
3. Rapidly evaluate vital signs (pulse, blood pressure, respiration, temperature).
4. Turn the woman onto her side.
5. Keep the woman warm but do not overheat her.
6. Elevate the legs.

**Notes to the facilitator:**

- Start an IV infusion (two, if possible); collect blood for estimation of hemoglobin, immediate cross-match, and bedside clotting, just before infusion of fluids; and rapidly infuse IV fluids to replace fluid volume that has been lost.
- Start two IVs: one site to replace fluid loss and the other to give medications.
- Catheterize the bladder. This allows the health care provider to keep track of fluid intake and urine output and monitor the woman's response to fluids.
- **If available, give oxygen.** Giving oxygen will improve oxygenation of vital organs at a time when the circulatory system is not able to.
- Ask for questions before proceeding.

**Immediate management of shock**  
(Slide 2 / 2)

AT3-11

7. Start an IV infusion (two if possible) and rapidly infuse IV fluids.
8. Catheterize the bladder and monitor fluid intake and urine output.
9. If available, give oxygen at 6–8 L per minute by mask or nasal cannulae.
10. Continue to monitor vital signs (every 15 minutes) and blood loss.
- 11. Determine the cause of shock and begin treatment.**

## Flipchart / Overhead / PowerPoint slides 12 and 13

**Time: 15 min.**

### Activities:

- Illustrated lecture to present general management of vaginal bleeding after childbirth.
- Simulation of general management of vaginal bleeding after childbirth.

**Objective:** Describe the immediate medical management if the woman begins to bleed excessively after childbirth.

### Notes to the facilitator:

- Present the flipchart describing general management of vaginal bleeding after childbirth (if possible, perform a simulation of the steps). Ask participants to turn to the job aid for immediate management of vaginal bleeding after childbirth.
- Explain that the steps in general management provide emergency management and assist the provider in making a diagnosis of PPH:
  - **Initial rapid evaluation** assists the provider in making a decision to treat the woman for shock and also provides a baseline for evaluation of any treatment provided.
  - When providing **uterine massage** the provider can assess if the uterus is atonic, expel any blood clots that may prevent the uterus from contracting effectively, and stimulate uterine contractions.
  - **Administering oxytocin** ensures an early start to treatment for uterine atony (the leading cause of PPH).

Vaginal bleeding after childbirth (Slide 1 / 2)		AT3-12
1. SHOUT FOR HELP.		
2. Urgently mobilize all available personnel.		
3. Make a rapid evaluation of the general condition of the woman, including vital signs (pulse, blood pressure, respiration, temperature).		
4. If shock is suspected, immediately begin treatment. Even if signs of shock are not present, keep shock in mind,		
5. Massage the uterus to expel blood and blood clots,		
6. Give oxytocin 10 units IM.		

**Notes to the facilitator:**

- An **IV infusion** prevents and/or treats shock and maintains blood volume.
- Examining the **bladder** and assisting the woman to empty it will assist the provider in deciding if a full bladder is contributing to uterine atony and will prevent uterine atony by ensuring the bladder is empty.
- **Examining the placenta** will assist the provider in deciding if retained placenta or placental fragments is the cause of PPH.
- **Examining the vagina and perineum** for tears will assist the provider in deciding if genital lacerations are the cause of PPH (examination of the cervix should only occur if there are no identified vaginal or perineal lacerations, the uterus is well contracted, and the placenta is complete).
- Ask for questions before proceeding.

**Vaginal bleeding after childbirth** AT3-13  
(Slide 2 / 2)

6. Start an IV infusion and infuse IV fluids.
7. Help the woman empty her bladder.
8. Check to see if the placenta has been expelled and examine the placenta to be certain it is complete.
9. Examine the vagina, perineum, and cervix for tears.
10. Determine the cause of bleeding and begin treatment.

**Flipchart / Overhead / PowerPoint slide 14****Time: 5 min.****Activity:** Illustrated lecture to review the principal causes of PPH.**Notes to the facilitator:**

- Briefly review the principal causes of PPH.

**Principal causes of PPH** AT3-14

- Uterine atony (cause 70-90% of PPH)
- Genital lacerations
- Retained placenta
- Uterine rupture or inversion
- Disseminated intravascular coagulopathy (blood-clotting disorders)

## Flipchart / Overhead / PowerPoint slides 15 and 16

**Time: 15 min.**

**Activity:** Individual work to review signs and symptoms associated with the most common causes of PPH.

Mini case studies	AT3-15
<ul style="list-style-type: none"><li>• Find learning activity 2: <i>Assessing excessive vaginal bleeding after childbirth</i>, found in the classroom learning activities for Additional Topic 3: <i>Managing complications during the third stage of labor</i> in the <b>Participant's Notebook</b>.</li><li>• Read through each mini case study and decide on the most probable cause of each woman's postpartum hemorrhage.</li><li>• You may refer to Table 8 in Additional Topic 3: <i>Managing complications during the third stage of labor</i> in the <b>Reference Manual</b>.</li></ul>	

### Notes to the facilitator:

- Ask participants to turn to classroom learning activity 2: *Assessing excessive vaginal bleeding after childbirth* for Additional Topic 3: *Managing complications during the third stage of labor* in the **Participant's Notebook**.
- They should also refer to Table 8 in Additional Topic 3 in the **Reference Manual**.
- Give participants 5 minutes to read the mini case studies and write in their answers.

### Notes to the facilitator:

- After they have had time to review the mini case studies, put the correct answers up (remember that the answer provides the MOST probable diagnosis).
- Ask participants if their answers agree with yours. Facilitate a discussion if there are questions about the probable diagnosis.
- Answer any questions.

Mini case studies	AT3-16
Answers	
<ul style="list-style-type: none"><li>• Ms. A: Retained placenta</li><li>• Ms. B: Genital lacerations</li><li>• Ms. C: Cervical tear</li><li>• Ms. D: Retained placental fragments + uterine atony</li><li>• Ms. E: Inverted uterus</li><li>• Ms. F: Uterine atony</li></ul>	



**Flipchart / Overhead / PowerPoint slides 17 and 18**

**Time: 15 min.**

**Activity:** Illustrated lecture to review management of uterine atony.

**Objective:** Describe the immediate medical management of the woman whose uterus does not contract adequately.

**Notes to the facilitator:**

- Ask participants to turn to the section *What if the uterus does not adequately contract?* in Additional Topic 3 of the **Reference Manual** and refer to management of uterine atony.
- Present the steps to follow when a woman presents with uterine atony (if possible, perform a simulation of the steps as presented in the **Reference Manual**).
- Remind participants that uterine atony is the leading cause of PPH.
- Emphasize that uterine atony may coexist with genital lacerations, retained placental fragments, retained placenta, and clotting disorders.
- Emphasize that packing the uterus is ineffective and wastes precious time.

### Uterine Atony: Management AT3-17

- Continue to massage the uterus
- Use uterotonic drugs
- Perform bimanual compression
- Perform aortic compression
- Surgical management

**At all times:**

- Anticipate need for blood and transfuse as necessary.
- Consider other causes / contributing factors – genital lacerations, retained placenta, clotting disorder.

**Packing the uterus is ineffective and wastes precious time.**

**Notes to the facilitator:**

- Review uterotonic drugs to administer to manage uterine atony (see Table 9 in the **Reference Manual**).

Uterotonics for treatment of PPH <span style="float: right;">AT3-18</span>			
	<i>Oxytocin</i>	<i>Ergometrine</i>	<i>Misoprostol</i>
<i>Dose and route</i>	IV: Infuse 20 units in 1 L IV fluids at 60 drops per minute IM: 10 units	IM: give 0.2 mg	1,000 mcg rectally
<i>Continuing dose</i>	IV: Infuse 20 units in 1 L IV fluids at 40 drops per minute	Repeat 0.2 mg IM after 15 minutes If required, give 0.2 mg IM every 4 hours	Not known
<i>Maximum dose</i>	Not more than 3 L of IV fluids containing oxytocin	5 doses (total 1.0 mg)	Oral dose should not exceed 600 mcg because of risk of fever

## Flipchart / Overhead / PowerPoint slide 19

**Time: 10 min.**

**Activity:** Demonstration of a bedside clotting test.

### Notes to the facilitator:

- Demonstrate how to perform a bedside clotting test to rule out a blood clotting disorder.
- Remind participants that they should also consider the possibility that the woman has a clotting disorder any time a woman has PPH.

**Bedside clotting test**AT3-19

- Take 2 mL of venous blood into a small, dry, clean plain glass test tube (approximately 10 mm x 75 mm).
- Hold the tube in your closed fist to keep it warm (+37°C).
- After 4 minutes, tip the tube slowly to see if a clot is forming. Then tip it again every minute until the blood clots and the tube can be turned upside down.
- Failure of a clot to form after 7 minutes or a soft clot that breaks down easily suggests a blood-clotting disorder.

## Flipchart / Overhead / PowerPoint slides 20 and 21

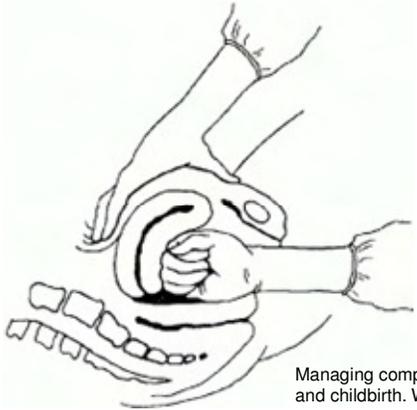
**Time: 20 min.**

**Activity:** Demonstration and return demonstration of internal bimanual compression of the uterus.

### Notes to the facilitator:

- Ask participants to stand around the model to observe the demonstration of internal bimanual uterine compression. Make sure that everyone can see.

**Internal bimanual compression**AT3-20



Managing complications in pregnancy and childbirth. WHO. 2003

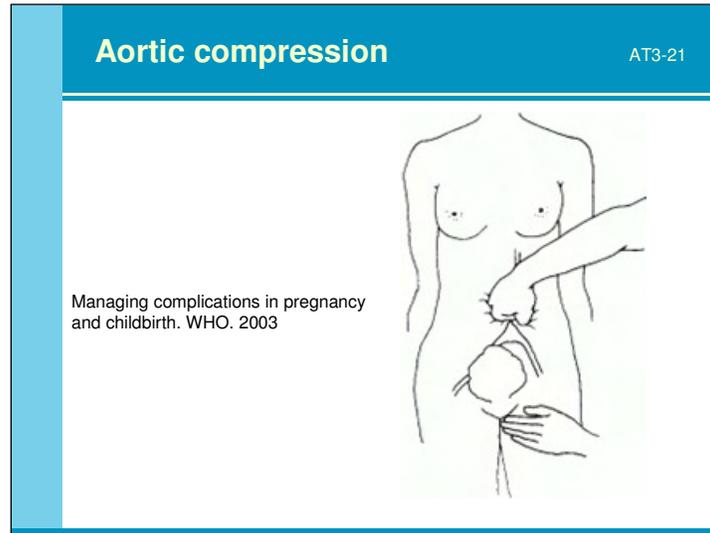
- Follow steps for internal bimanual uterine compression as listed in the **Reference Manual**. Ask participants to refer to the **Reference Manual** and follow along as you provide the demonstration.
- Ask for questions before proceeding. Repeat any steps that may be unclear.
- Give participants time to practice internal bimanual uterine compression on the obstetric model.



**Activity:** Demonstration and return demonstration of aortic compression.

**Notes to the facilitator:**

- Ask participants to stand around the model to observe the demonstration of aortic compression. Make sure that everyone can see.
- Follow steps for aortic compression as listed in the **Reference Manual**. Ask participants to refer to the **Reference Manual** and follow along as you provide the demonstration.
- Ask for questions before proceeding. Repeat any steps that may be unclear.
- Give participants time to practice aortic compression on the obstetric model.



**Flipchart / Overhead / PowerPoint slide 22**

**Time: 20 min**

**Activity:** Small group work to review management of genital tears, retained placental fragments, retained placenta.

**Objective:** Describe the immediate medical management of the woman whose uterus does not contract adequately.

**Small Group Work**

AT3-22

- **Group 1:** Develop a job aid that describes management of genital tract tears (refer to Additional Topic 3 in the **Reference Manual**).
- **Group 2:** Develop a job aid that describes management of retained placenta (refer to Additional Topic 3 in the **Reference Manual**).
- **Group 3:** Develop a job aid that describes management of retained placental fragments (refer to Additional Topic 3 in the **Reference Manual**).

**Notes to the facilitator:**

- Divide the group in three smaller groups. Assign each group the task of preparing a job aid that describes management of genital tears (group 1), management of retained placenta (group 2), management of retained placental fragments (group 3).
- Give each group 10 minutes to work on their task.
- Circulate around the room and assist participants as they work on their task.
- Each group should present their job aid to the large group.

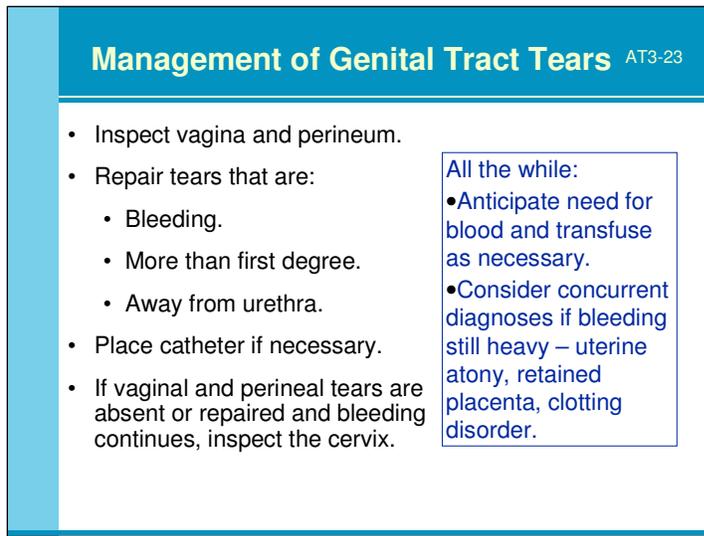
### Flipchart / Overhead / PowerPoint slide 23

**Time: 10 min.**

**Activity:** Provide a summary of management of genital tract tears after the group has presented their job aid.

**Notes to the facilitator:**

- After Group 1 has presented their job aid on management of genital tears, present the flipchart/overhead/PowerPoint slide summarizing management of genital tract tears.



**Management of Genital Tract Tears** AT3-23

- Inspect vagina and perineum.
- Repair tears that are:
  - Bleeding.
  - More than first degree.
  - Away from urethra.
- Place catheter if necessary.
- If vaginal and perineal tears are absent or repaired and bleeding continues, inspect the cervix.

**All the while:**

- Anticipate need for blood and transfuse as necessary.
- Consider concurrent diagnoses if bleeding still heavy – uterine atony, retained placenta, clotting disorder.

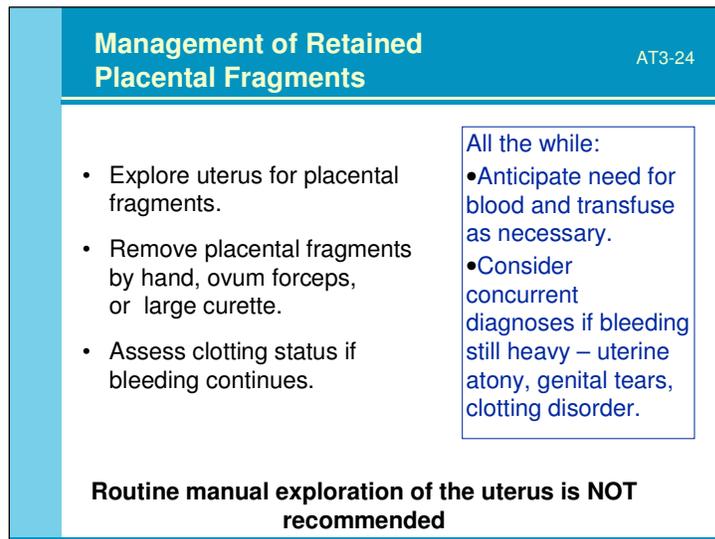
### Flipchart / Overhead / PowerPoint slide 24

**Time: 10 min.**

**Activity:** Provide a summary of management of retained placental fragments after the group has presented their job aid.

**Notes to the facilitator:**

- After Group 2 has presented their job aid on management of retained placental fragments, present the flipchart/overhead/PowerPoint slide summarizing management of retained placental fragments.



**Management of Retained Placental Fragments** AT3-24

- Explore uterus for placental fragments.
- Remove placental fragments by hand, ovum forceps, or large curette.
- Assess clotting status if bleeding continues.

**All the while:**

- Anticipate need for blood and transfuse as necessary.
- Consider concurrent diagnoses if bleeding still heavy – uterine atony, genital tears, clotting disorder.

**Routine manual exploration of the uterus is NOT recommended**

**Flipchart / Overhead / PowerPoint slide 25****Time: 10 min.****Activity:** Provide a summary of management of retained placenta after the group has presented their job aid.**Notes to the facilitator:**

- After Group 3 has presented their job aid on management of retained placenta, present the flipchart/overhead/PowerPoint slide summarizing management of retained placenta.

<b>Management of Retained Placenta</b> AT3-25	
<ul style="list-style-type: none"><li>• If placenta is seen, ask woman to push; if in vagina, remove.</li><li>• Ensure bladder is empty; catheterize if necessary.</li><li>• Give oxytocin 10 units IM if not already done.</li><li>• Attempt controlled cord traction.</li><li>• If not successful, manually remove placenta (give one dose of prophylactic antibiotics if manual removal of placenta).</li><li>• Assess clotting status if bleeding continues.</li></ul>	<p>All the while:</p> <ul style="list-style-type: none"><li>• Anticipate need for blood and transfuse as necessary.</li><li>• Consider concurrent diagnoses if bleeding still heavy – uterine atony, genital tears, clotting disorder.</li></ul>

## Flipchart / Overhead / PowerPoint slides 26 and 27

**Time: 10 min.**

**Activity:** Illustrated lecture to review management of inverted uterus.

**Objective:** Describe the immediate medical management of the woman whose uterus has inverted.

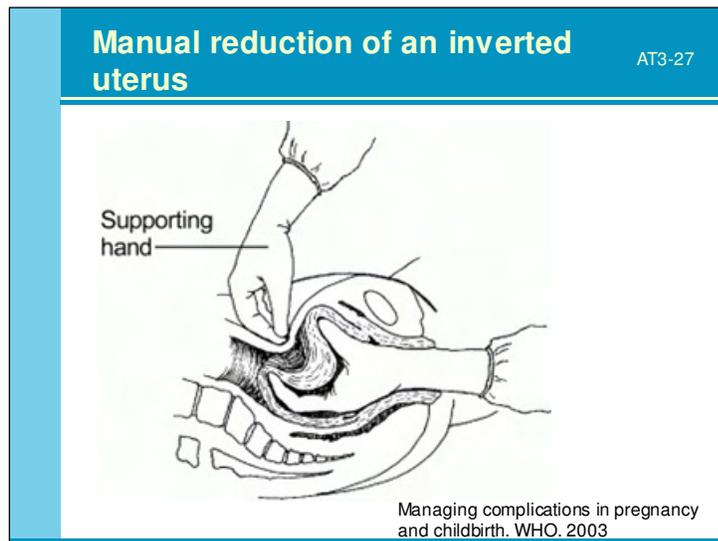
### Notes to the facilitator:

- Ask participants to turn to the section *What if the uterus inverts?* found in Additional Topic 3 of the **Reference Manual**.
- Remind participants that uterine inversion is very rare and that AMTSL is not associated with increased rates of uterine inversion when it is performed according to standards
- Provide an illustrated lecture on management of inverted uterus.
- Emphasize that the provider should not administer uterotonic drugs or attempt placental removal until the inversion is corrected.
- Ask for questions before proceeding.

### Management of Inverted Uterus AT3-26

<ul style="list-style-type: none"><li>• Act quickly.</li><li>• Assess clotting status.</li><li>• Reposition uterus.</li><li>• Hold oxytocics until uterus is repositioned.</li><li>• Give antibiotics as for metritis if signs of infection are present.</li><li>• Refer for surgical intervention if necrosis is suspected.</li></ul>	<p><b>All the while:</b></p> <ul style="list-style-type: none"><li>• Give IV fluids.</li><li>• Anticipate need for blood and transfuse as necessary.</li><li>• Give pain medication and antibiotics.</li><li>• Consider concurrent diagnoses if bleeding still heavy.</li></ul>
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**Do not give uterotonic drugs until the inversion is corrected. If the placenta has not separated from the uterine wall when inversion occurs, do not attempt removal of the placenta until the inversion is corrected**



### Notes to the facilitator:

- Ask participants to stand around the model to observe the demonstration of manual reduction of an inverted uterus. Make sure that everyone can see.
- Follow steps for manual reduction of an inverted uterus as listed in the **Reference Manual**. Ask participants to refer to the **Reference Manual** and follow along as you provide the demonstration.
- Ask for questions before proceeding.



## Flipchart / Overhead / PowerPoint slides 28 and 29

**Time: 10 min.**

**Activity:** Question-and-answer to review management of ruptured cord.

**Objective:** Describe the immediate medical management of the woman whose uterus has inverted.

### Notes to the facilitator:

- Ask participants to turn to the section *What if the cord tears off during controlled cord traction?* found in Additional Topic 3 in the **Reference Manual**.
- Ask participants to suggest ways to manage ruptured cord. Write their responses on a flipchart.

Brainstorming	AT3-28
<h3>Steps for managing ruptured cord</h3>	

Management of ruptured cord	AT3-29
<ul style="list-style-type: none"> <li>• Have the woman empty her bladder or ensure that the bladder is empty; catheterize the bladder only if necessary.</li> <li>• If the placenta has separated and is in the vagina:               <ul style="list-style-type: none"> <li>- Ask the woman to squat.</li> <li>- With a contraction, ask the woman to push the placenta out.</li> </ul> </li> <li>• If the placenta has not separated, consider manual removal of the placenta.</li> </ul>	

### Notes to the facilitator:

- When all responses are exhausted, show the slide describing management of a ruptured cord.
- Remind participants that AMTSL is not associated with increased rates of ruptured cords when it is performed according to standards
- Ask for questions before proceeding.

### Flipchart / Overhead / PowerPoint slide 30

**Time: 30 min.**

**Activity:** Case study to review management of PPH.

#### Notes to the facilitator:

- Divide participants into groups of 3 to 4 people (try to ensure that there is a mix of cadres of providers in each group).
- Facilitate group work.
- After 20 minutes, facilitate a discussion about the answers in a plenary. Answers to the case study are in the **Facilitator's Guide** and the **Participant's Notebook**.

#### Small Group Work (Groups of 3-4 people)

AT3-30

- Turn to classroom learning activity 3 for *Additional Topic 3* in the **Participant's Notebook**.
- Carefully read the case study and then respond to the questions (refer to *Additional Topic 3* in the **Reference Manual**).  
*20 minutes*
- Discuss responses in the plenary.  
*10 minutes*

### Flipchart / Overhead / PowerPoint slide 31

**Time: 60 min.**

**Activity:** Clinical simulation to summarize key points in the session.

#### Clinical simulation: Management of vaginal bleeding after childbirth

AT3-31



#### Notes to the facilitator:

- Refer to the **Facilitator's Guide** for instructions on how to facilitate the clinical simulation.
- Answers for the clinical simulation are on the pages following instructions for facilitating the clinical simulation.
- The questions, without the answers, are located in the **Participant's Notebook**.

**Flipchart / Overhead / PowerPoint slide 32****Notes to the facilitator:**

- Encourage participants to work on learning activities found in the **Participant's Notebook** for Additional Topic 3.
- Participants may work individually or in groups on the learning activities during breaks, in the evening, or in the clinical area when there are no clients.
- Participants may correct their learning activities by referring to suggested answers found in the **Participant's Notebook**. Facilitators should make themselves available to work with the participants to review answers for learning activities.

Learning activities	AT3-32
<ul style="list-style-type: none"><li>• Please complete learning activities found in the <b>Participant's Notebook</b> for Additional Topic 3</li><li>• You may work individually or in groups on the learning activities during breaks, in the evening, or in the clinical area when there are no clients</li><li>• You may correct your answers individually or with another participant or the facilitator.</li><li>• See a facilitator if you have questions.</li></ul>	

## Case study: Vaginal bleeding after childbirth—Answer Key

Read and carefully analyze this case study.\* Consider the steps in clinical decision-making as you answer the questions.

**Case study:** Mrs. B is a 30-year-old, para four, who just gave birth at the health center to a full-term, healthy newborn weighing 4.2 kg. She was given ergometrine 0.2 mg IM after birth of the newborn. The placenta was delivered 5 minutes later, without complications. However, half an hour after childbirth, Mrs. B reports heavy vaginal bleeding.

### Assessment (history, physical examination, screening procedures, and laboratory tests)

1. What will you do in your initial assessment of Mrs. B, and why?
  - **Mrs. B. should be told what is going to be done and listened to carefully. In addition, her questions should be answered in a calm and reassuring manner.**
  - **At the same time, a rapid assessment should be done to check for signs of shock (rapid, weak pulse, systolic blood pressure less than 90 mm Hg, pallor and sweatiness, rapid breathing, confusion).**
  - **The placenta should be checked thoroughly for completeness.**
2. What aspects of Mrs. B's physical examination will help you make an immediate diagnosis or identify her problems/needs, and why?
  - **Mrs. B's uterus should be checked immediately to see whether it is contracted. If the uterus is contracted and firm, the most likely cause of bleeding is genital trauma. If the uterus is not contracted and the placenta is complete, the most likely cause of bleeding is an atonic uterus. The most important causes of bleeding can be suspected by palpating the uterus.**
  - **Her perineum, vagina, and cervix should be examined carefully for tears.**

### Diagnosis (identifying problems and/or needs)

You have completed your assessment of Mrs. B, and your main findings include the following:

Mrs. B's **vital signs**: pulse: 88 beats/minute; blood pressure: 110/80 mm Hg; respiration: 18 breaths/minute; temperature: 37°C. Her uterus is firm and well-contracted. The placenta is complete, and she doesn't have perineal trauma. Examination of the vagina and cervix is difficult because she continues to have heavy vaginal bleeding; therefore, tears of the cervix and vagina are possible.

3. Based on these findings, what is Mrs. B's diagnosis, and why?
  - **Mrs. B's symptoms and signs (e.g., immediate postpartum hemorrhage, placenta complete, uterus well contracted) are consistent with genital trauma.**

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\* Case study adapted from JHPIEGO/Maternal & Neonatal Health. *Managing Complications in Pregnancy and Childbirth Learning Resource Package: A Guide for Teachers.*



### Care provision (Planning and Intervention)

4. Based on your diagnosis, what is your plan of care for Mrs. B, and why?
- ***An IV should be started using a large-bore needle to replace fluid loss, using Ringer's lactate or normal saline.***
  - ***A careful speculum examination of the vagina and cervix should be conducted without delay, as tears of either the cervix and/or the vagina are the most likely cause of Mrs. B's bleeding.***
  - ***Any tears should be repaired immediately.***
  - ***Mrs. B's vital signs and fluid intake and output should be monitored.***
  - ***Her uterus should also be checked to make sure that it remains firm and well contracted.***
  - ***Blood should be drawn for hemoglobin and cross-matching, and blood for transfusion should be made available as soon as possible, in the event that it is needed.***
  - ***The steps taken to manage the complication should be explained to Mrs. B. She should be encouraged to express her concerns, listened to carefully, and provided emotional support and reassurance.***

### Evaluation

One hour after childbirth, Mrs. B has a cervical tear repaired.

5. Based on these findings, what is your continuing plan of care for Mrs. B, and why?
- ***Mrs. B's vital signs and blood loss should continue to be monitored—every 15 minutes for 1 hour, then every 30 minutes for 1 hour, then every 4 hours for 24 hours. Her uterus should be checked to make sure that it remains firm and well contracted. In addition, she should be encouraged to breastfeed her newborn.***
  - ***Twenty-four hours after the bleeding has stopped, check her hemoglobin and hematocrit to assess for anemia.***
  - ***If Mrs. B's hemoglobin is below 7 g/dL, or her hematocrit is below 20% (indicating severe anemia), she should be given ferrous sulfate or ferrous fumarate 120 mg by mouth plus folic acid 400 µg by mouth once daily for 3 months. A blood transfusion is not needed if her vital signs are stable and no further bleeding occurs.***
  - ***If Mrs. B's hemoglobin is between 7 to 11 g/dL, she should be given ferrous sulfate or ferrous fumarate 60 mg by mouth plus folic acid 400 µg by mouth once daily for 6 months.***
  - ***The steps taken for continuing management of the complication should be explained to Mrs. B. She should be encouraged to express her concerns, listened to carefully, and provided continuing emotional support and reassurance.***
  - ***Mrs. B. should remain at the health center for an additional 24 hours, and before discharge, counseling should be provided about danger signs in the postpartum period (bleeding, fever, headache, blurred vision) and about compliance with iron/folic acid treatment and the inclusion in her diet of locally available foods rich in iron. In addition, counseling about breastfeeding and newborn care should be provided.***

### REFERENCES

WHO. *Managing complications in pregnancy and childbirth: A guide for midwives and doctors*. Geneva: WHO, 2000. (pages S-25 to S-31)

## Clinical Simulation: Management of Vaginal Bleeding After Childbirth

**Purpose:** The purpose of this clinical simulation\* is to help training participants practice problem-solving and decision-making skills in the management of vaginal bleeding after childbirth, emphasizing quick recognition and appropriate management.<sup>6</sup>

**Time: 60 minutes**

**Instructions:** The activity should be carried out in the classroom, the labor and delivery area of a hospital, or clinic or maternity center. Make sure that the necessary equipment and supplies are available during the simulation activity.

- One participant should play the role of patient and a second participant the role of skilled provider. Other participants may be called on to assist the provider.
- The facilitator will give the participant playing the role of provider information about the patient's condition and ask pertinent questions, as indicated in the left-hand column of the chart below.
- The participant will be expected to assess the situation and react (intervene) rapidly when the facilitator provides information and asks questions. Key reactions/responses expected from the participant are provided in the right-hand column of the chart below.
- Procedures such as starting an IV and bimanual examination should be role-played, using the appropriate equipment.
- Initially, the facilitator and participant will discuss what is happening during the simulation in order to develop problem-solving and decision-making skills. The italicized questions in the simulation are for this purpose. Further discussion may take place after the simulation is completed.
- As the participant's skills become stronger, the focus of the simulation should shift to providing appropriate care for the life-threatening emergency in a quick, efficient, and effective manner. All discussion and questioning should take place after the simulation is over.

**Resources:** *Reference Manual, blood pressure machine, stethoscope, equipment for starting an IV infusion, oxygen cylinder, mask and tubing, syringes and vials, speculum, sponge forceps, high-level disinfected or sterile surgical gloves.*

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\* Adapted from *Managing Complications in Pregnancy and Childbirth. Learning Resource Package: Guide for Teachers*; JHPIEGO/Maternal & Neonatal Health.<sup>6</sup>



<b>Scenario 1</b>	
<b>Information provided and questions asked by the facilitator</b>	<b>Key reactions and responses from participants</b>
<p>1. Mrs. B is 24 years old and has just given birth to a healthy baby girl after seven hours of labor. The provider performed AMTSL, and the placenta and membranes were complete. The midwife who attended the birth left the hospital at the end of her shift, shortly after the birth. About 30 minutes later, a nurse rushes to tell you that Mrs. B is bleeding profusely.</p> <p><b>What will you do?</b></p>	<ul style="list-style-type: none"> <li>• Shouts for help to urgently mobilize all available personnel.</li> <li>• Makes a rapid evaluation of Mrs. B’s general condition, including vital signs (pulse, blood pressure and respiration rate), level of consciousness, color and temperature of skin.</li> <li>• Explains to Mrs. B what is going to be done, listens to her, and responds attentively to her questions and concerns.</li> </ul>
<p>2. During the examination, Mrs. B’s blood pressure is 102/72 mm Hg and pulse 102 beats/minute and weak. Her skin is not cold and clammy.</p> <p><b>What is Mrs. B’s likely diagnosis?</b></p> <p><b>What will you do now?</b></p>	<ul style="list-style-type: none"> <li>• States that Mrs. B is not in shock from postpartum bleeding.</li> <li>• Palpates the uterus for firmness.</li> <li>• Asks one of the staff that responded to her shout for help to start an IV infusion, using a large-bore cannula and normal saline or Ringer’s lactate at a rate of 1 L in 15–20 minutes with 10 units oxytocin.</li> <li>• While starting the IV, collects blood for appropriate tests (hemoglobin, blood typing, and cross-matching, and bedside clotting test for clotting disorder).</li> </ul>
<p><b>Discussion Question 1:</b> How would you know when a woman is in shock?</p>	<p><i>Expected Responses: Pulse is greater than 110 beats/minute; systolic blood pressure less than 90 mm Hg; cold, clammy skin; pallor; respiration rate greater than 30 breaths/minute; anxious and confused or unconscious.</i></p>
<p>3. You find that Mrs. B’s uterus is soft and not contracted.</p> <p><b>What will you do now?</b></p>	<ul style="list-style-type: none"> <li>• Massages the uterus to expel blood and blood clots and stimulate a contraction.</li> <li>• Starts oxygen at 6–8 L/minute.</li> <li>• Catheterizes bladder.</li> <li>• Covers Mrs. B to keep her warm.</li> <li>• Continues to monitor (or has assistant monitor) blood pressure, pulse, and blood loss.</li> </ul>

<b>Scenario 1</b>	
<b>Information provided and questions asked by the facilitator</b>	<b>Key reactions and responses from participants</b>
<p>4. After five minutes, Mrs. B's uterus is well contracted, but she continues to bleed heavily.</p> <p><b>What will you do now?</b></p>	<ul style="list-style-type: none"> <li>• Examines the cervix, vagina, and perineum for tears.</li> <li>• Asks one of staff assisting to locate placenta and examines for missing pieces.</li> </ul>
<p>5. On further examination of the placenta, you find that it is complete. On examination of Mrs. B's cervix, vagina, and perineum, you find a cervical tear. She continues to bleed heavily.</p> <p><b>What will you do now?</b></p>	<ul style="list-style-type: none"> <li>• <i>Prepares to repair the cervical tear.</i></li> <li>• Tells Mrs. B what is happening, listens to what she has to say, and provides reassurance.</li> <li>• Has a staff member assisting check Mrs. B's vital signs.</li> </ul>
<p><b>Discussion Question 2:</b> <i>What would you have done if examination of the placenta had shown a missing piece (placenta incomplete)?</i></p>	<p><i>Expected Responses:</i></p> <ul style="list-style-type: none"> <li>• <i>Explain the problem to Mrs. B and provide reassurance.</i></li> <li>• <i>Give pain medications and prophylactic antibiotics.</i></li> <li>• <i>Use sterile or high-level disinfected gloves to explore the uterus for placental fragments and remove with hand, ovum forceps, or large curette.</i></li> </ul>
<p>6. Forty-five minutes have passed since treatment for Mrs. B was started. You have just finished repairing Mrs. B's cervical tear. Her blood pressure is now 110/78 mm Hg, pulse 98 beats/minute, and respiration rate 24 breaths/minute. She is resting quietly.</p> <p><b>What will you do now?</b></p>	<ul style="list-style-type: none"> <li>• Adjusts rate of IV infusion to 1 L in 6 hours.</li> <li>• Continues to check for vaginal blood loss.</li> <li>• Continues to monitor blood pressure and pulse.</li> <li>• Checks that urine output is 30 mL/hour or more.</li> <li>• Continues with routine postpartum care, including breastfeeding of newborn.</li> </ul>



## Checklists for Facilitators

The **following checklists\*** can be used by facilitators to assess their own clinical teaching skills or to provide feedback to other facilitators.

### Checklist for Classroom Presentation Skills (To be completed by Facilitator)

Place a  in case box if step/task is performed **satisfactorily**, an "X" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

**Satisfactory:** Performs the step or task according to standard procedure or guidelines.

**Unsatisfactory:** Does not perform the step or task according to standard procedure or guidelines.

**Not Observed:** Step or task not performed by participant during evaluation by facilitator.

Checklist for Classroom Presentation Skills					
STEP/TASK	OBSERVATIONS				
1. Presents an effective introduction.					
2. States the objective(s) as part of the introduction.					
3. Asks questions of the entire group.					
4. Targets questions to individuals.					
5. Asks questions at a variety of levels.					
6. Uses participant names.					
7. Provides positive feedback.					
8. Responds to participant questions.					
9. Follows facilitator's notes and/or a personalized reference manual.					
10. Maintains eye contact.					
11. Projects voice so that all participants can hear.					
12. Moves about the room.					
13. Uses audiovisuals effectively.					
14. Displays a positive use of humor.					
15. Presents an effective summary.					
16. Provides for application or practice of presentation content.					
<b>Delivered an effective classroom presentation</b>					

\* Checklists from [www.reproline.jhu.edu](http://www.reproline.jhu.edu), the website of the JHPIEGO Corporation.<sup>7</sup>

## Checklist for Clinical Coaching Skills<sup>7</sup> (To be completed by Facilitator)

Place a  in case box if step/task is performed **satisfactorily**, an "X" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

**Satisfactory:** Performs the step or task according to standard procedure or guidelines.

**Unsatisfactory:** Does not perform the step or task according to standard procedure or guidelines.

**Not Observed:** Step or task not performed by facilitator during evaluation by a peer facilitator.

<b>Checklist for Clinical Coaching Skills</b>					
<b>STEP/TASK</b>	<b>OBSERVATIONS</b>				
<b>Before practice session</b>					
1. Greets participant.					
2. Asks the participant to review her/his performance in previous practice sessions.					
3. Asks the participant which steps or tasks s/he would like to work on during the practice session.					
4. Reviews any difficult steps or tasks in the checklist that will be practiced during the session.					
5. Works with the participant to set specific goals for the practice session.					
<b>During practice session</b>					
1. Observes the participant as s/he practices the procedure.					
2. Provides positive reinforcement and suggestions for improvement as the participant practices the procedure.					
3. Refers to the checklist during observation.					
4. Records notes about participant performance on the checklist during the observation.					
5. Is sensitive to the client when providing feedback to the participant during a clinical session with clients.					
6. Provides corrective comments only when the comfort or safety of the client is in doubt.					



<b>Checklist for Clinical Coaching Skills</b>					
<b>STEP/TASK</b>	<b>OBSERVATIONS</b>				
<b>After practice feedback session</b>					
1. Greets the participant.					
2. Asks the participant to share feelings about the practice session.					
3. Asks the participant to identify those steps performed well.					
4. Asks the participant to identify those steps where performance could be improved.					
5. Refers to notes on the learning guide.					
6. Provides positive reinforcement regarding those steps or tasks the participant performed well.					
7. Offers specific suggestions for improvement.					
8. Works with the participant to establish goals for the next practice session.					
<b>Used effective coaching skills</b>					

## Checklist for Clinical Demonstration Skills (To be completed by Facilitator)

Place a  in case box if step/task is performed **satisfactorily**, an "X" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

**Satisfactory:** Performs the step or task according to standard procedure or guidelines.

**Unsatisfactory:** Does not perform the step or task according to standard procedure or guidelines.

**Not Observed:** Step or task not performed by facilitator during evaluation by a peer facilitator.

<b>Checklist for Clinical Demonstration Skills</b>					
<b>STEP/TASK</b>	<b>OBSERVATIONS</b>				
1. Uses facilitator's notes or a personalized reference manual.					
2. States the objective(s) as part of the introduction.					
3. Presents an effective introduction.					
4. Arranges demonstration area so that participants are able to see each step in the procedure clearly.					
5. Never demonstrates an incorrect procedure or shortcut.					
6. Communicates with the model or client during demonstration of the skill/activity.					
7. Asks questions and encourages participants to ask questions.					
8. Demonstrates or simulates appropriate infection prevention practices.					
9. When using model, positions model as an actual client.					
10. Maintains eye contact with participants as much as possible.					
11. Projects voice so that all participants can hear.					
12. Provides participants opportunities to practice the skill/activity under direct supervision.					
<b>Presented an effective clinical demonstration</b>					



## Administrative Documents

### POPPHI: ACTIVE MANAGEMENT OF THE THIRD STAGE OF LABOR TRAINING PROGRAM

#### Registration Form

##### General Information

Name \_\_\_\_\_

Surname

First

Middle

Title: Mrs. ( ) Miss ( ) Ms. ( ) Mr. ( ) Dr. ( )

Sex: Male \_\_\_\_\_ Female \_\_\_\_\_

Contact Address \_\_\_\_\_

\_\_\_\_\_

Home or mobile telephone \_\_\_\_\_ E-mail \_\_\_\_\_

Place of work \_\_\_\_\_

Address \_\_\_\_\_

Telephone \_\_\_\_\_ Work E-mail \_\_\_\_\_

##### Professional Qualification

Please tick all that apply

Registered Nurse \_\_\_\_\_ Registered Midwife \_\_\_\_\_ Public Health Nurse \_\_\_\_\_

Obstetrical Nurse \_\_\_\_\_

Obstetrician/Gynecologist \_\_\_\_\_ Physician \_\_\_\_\_ Clinical Officer \_\_\_\_\_

Medical Assistant \_\_\_\_\_

Other (please specify) \_\_\_\_\_

## AMTSL Training Registration Form

- Page 2 -

Job Title/Designation \_\_\_\_\_

Position \_\_\_\_\_

### Primary Responsibility

Clinical teaching \_\_\_\_\_

Clinical practice \_\_\_\_\_

Administration \_\_\_\_\_

Other (please specify) \_\_\_\_\_

### Main area of clinical work or teaching (tick the area where you spend most of your time as a provider or tutor/facilitator)

Antenatal clinic \_\_\_\_\_

Labor ward \_\_\_\_\_

Postpartum ward \_\_\_\_\_

Family planning clinic \_\_\_\_\_

Other (please specify) \_\_\_\_\_

Number of births you have attended in the last 3 months:

None ( ) 0-10 births ( ) 11-20 births ( ) >20 births ( )

### Experience with active management of third stage of labor (AMTSL)

Previous training in AMTSL: Yes ( ) No ( )

If yes: Date of training in AMTSL: \_\_\_\_/\_\_\_\_ (mm/yyyy)

Organization that provided training in AMTSL:

Pre-Service Education ( ) MOH ( ) NGO ( ) UNICEF ( )

UNFPA ( ) Other (please specify) \_\_\_\_\_ ( )

Number of times you have practiced AMTSL: Never practiced ( )

0-10 times ( ) 11-20 times ( ) >20 times ( )



## Final Evaluation Form

Please evaluate the following by ticking (✓) how you feel about each statement.

Feel free to comment below and use the back for more writing space.

Statement	Strongly Agree	Agree	Not Decided	Disagree	Strongly Disagree
1. For the work I do, training was appropriate.					
2. For the work I do, training was helpful.					
3. Training facilities and arrangements were satisfactory.					
4. The Participant's Manual and other reading materials were easy to understand.					
5. The reference manual and other reading materials helped me to learn.					
6. Teaching aids were useful (films, charts, models).					
7. The methods used for teaching were helpful (case studies, role-plays, clinical).					
8. The facilitators were knowledgeable and skilled.					
9. The facilitators were fair and friendly.					
10. The facilitators communicated clearly and simply.					
11. The objectives of the training were met.					

12. What 3 topics were most useful to you?

13. What 3 topics were not useful to you?

14. What 3 things would you change about the training?

Other comments (please use back of paper if needed):





## Pre-Course Questionnaire: AMTSL

### Instructions:

Read each question carefully before choosing a response. Write the letter "T" for True or "F" for False in the space provided after each statement.

If you do not understand a question, ask one of the facilitators to assist you before you respond to the question. Each question is worth 1 point.

### Instructions:

Read each question carefully before choosing a response. Write the letter "T" for True or "F" for False in the space provided after each statement.

If you do not understand a question, ask one of the facilitators to assist you before you respond to the question. Each question is worth 1 point.

### Scientific evidence

1. Active management of third stage of labor reduces the length of the third stage of labor.  
\_\_\_\_\_
2. The **only** difference between active and physiologic management of third stage of labor is that oxytocin is administered within a minute after birth of the baby in AMTSL.  
\_\_\_\_\_

### Causes and prevention of PPH

3. When a portion of the placenta—one or more lobes—is retained, it prevents the uterus from contracting effectively.  
\_\_\_\_\_
4. Immediate PPH is most commonly due to uterine atony (failure of the uterus to contract properly after the infant is born).  
\_\_\_\_\_
5. The best way to prevent PPH is to carefully identify risk factors in women during pregnancy and at the beginning of labor.  
\_\_\_\_\_
6. Monitoring labor using the partograph may help prevent PPH.  
\_\_\_\_\_

### Review of uterotonic drugs

7. Ergometrine is less stable than oxytocin when exposed to heat and light.  
\_\_\_\_\_
8. Temporary storage of oxytocin outside the refrigerator at a maximum of 30°C is acceptable for no more than three months.  
\_\_\_\_\_
9. Oxytocin should never be given to women with preeclampsia, eclampsia, or high blood pressure because it increases the risk of convulsions and cerebrovascular accidents.  
\_\_\_\_\_
10. Misoprostol is a uterotonic that can be used to treat PPH.  
\_\_\_\_\_

11. In the context of active management of the third stage of labor, if oxytocin is not available, skilled attendants should offer ergometrine/methylergometrine or the fixed drug combination of oxytocin and ergometrine to women without hypertension or heart disease for prevention of PPH.
- 

### **AMTSL**

12. Active management of the third stage of labor should be practiced only on women who have a history of postpartum hemorrhage.
- 
13. Delayed clamping and cutting of the umbilical cord is helpful to both term and preterm babies.
- 
14. Controlled cord traction should only be done in between contractions to prevent uterine inversion.
- 
15. Controlled cord traction should never be applied without applying countertraction (push) to the uterus above the pubic bone with the other hand.
- 
16. In the context of prevention of PPH, if oxytocin is not available or birth attendants' skills are limited, misoprostol should be administered soon after the birth of the baby.
- 
17. Active management decreases the need for uterotonic drugs to manage postpartum hemorrhage.
- 
18. The provider should wait for signs of placental separation before beginning controlled cord traction.
- 

### **Monitoring during the immediate postpartum period**

19. Ms. A gave birth to a healthy baby girl 30 minutes ago. You managed the third stage of labor actively, the placenta was complete, and she had no perineal or vaginal lacerations. You estimate that she lost about 300 mL of blood. Because the birth and third stage were normal, it is only necessary to monitor Ms. A's uterus and vaginal bleeding every hour.
- 
20. To ensure that the uterus remains contracted after delivery of the placenta, the provider should instruct the woman how the uterus should feel and how she can massage it herself.
-



## KEY Pre-Course Questionnaire: AMTSL

### Instructions:

Read each question carefully before choosing a response. Write the letter "T" for True or "F" for False in the space provided after each statement.

If you do not understand a question, ask one of the facilitators to assist you before you respond to the question. Each question is worth 1 point.

### Scientific evidence

1. Active management of third stage of labor reduces the length of the third stage of labor.  
**True**
2. The **only** difference between active and physiologic management of third stage of labor is that oxytocin is administered within a minute after birth of the baby in AMTSL.  
**False**

### Causes and prevention of PPH

3. When a portion of the placenta—one or more lobes—is retained, it prevents the uterus from contracting effectively.  
**True**
4. Immediate PPH is most commonly due to uterine atony (failure of the uterus to contract properly after the infant is born).  
**True**
5. The best way to prevent PPH is to carefully identify risk factors in women during pregnancy and at the beginning of labor.  
**False**
6. Monitoring labor using the partograph may help prevent PPH.  
**True**

### Review of uterotonic drugs

7. Ergometrine is less stable than oxytocin when exposed to heat and light.  
**True**
8. Temporary storage of oxytocin outside the refrigerator at a maximum of 30°C is acceptable for no more than three months.  
**True**
9. Oxytocin should never be given to women with preeclampsia, eclampsia, or high blood pressure because it increases the risk of convulsions and cerebrovascular accidents.  
**False**
10. Misoprostol is a uterotonic that can be used to treat PPH.  
**True**
11. In the context of active management of the third stage of labor, if oxytocin is not available, skilled attendants should offer ergometrine/methylergometrine or the fixed drug combination of oxytocin and ergometrine to women without hypertension or heart disease for prevention of PPH.  
**True**

## **AMTSL**

12. Active management of the third stage of labor should be practiced only on women who have a history of postpartum hemorrhage.  
**False**
13. Delayed clamping and cutting of the umbilical cord is helpful to both term and preterm babies.  
**True**
14. Controlled cord traction should only be done in between contractions to prevent uterine inversion.  
**False**
15. Controlled cord traction should never be applied without applying countertraction (push) to the uterus above the pubic bone with the other hand.  
**True**
16. In the context of prevention of PPH, if oxytocin is not available or birth attendants' skills are limited, misoprostol should be administered soon after the birth of the baby.  
**True**
17. Active management decreases the need for uterotonic drugs to manage postpartum hemorrhage.  
**True**
18. The provider should wait for signs of placental separation before beginning controlled cord traction.  
**False**

## **Monitoring during the immediate postpartum period**

19. Ms. A gave birth to a healthy baby girl 30 minutes ago. You managed the third stage of labor actively, the placenta was complete, and she had no perineal or vaginal lacerations. You estimate that she lost about 300 mL of blood. Because the birth and third stage were normal, it is only necessary to monitor Ms. A's uterus and vaginal bleeding every hour.  
**False**
20. To ensure that the uterus remains contracted after delivery of the placenta, the provider should instruct the woman how the uterus should feel and how she can massage it herself.  
**True**



## Mid-Course Questionnaire: AMTSL

### Instructions:

Read each question carefully before choosing a response. Choose only ONE response for each question. If you do not understand a question or response, ask one of the facilitators to assist you before you respond to the question.

### MULTIPLE CHOICE

Circle the best response for each question. Each question is worth 1 point.

### Scientific evidence

- 1) Which of the following statements describes an **advantage** of physiologic management of the third stage of labor?
  - a) It increases the length of the third stage of labor.
  - b) It does not interfere with the normal process of labor and childbirth.
  - c) It reduces the risk of PPH.
  - d) It reduces average amount of blood loss.
  
- 2) Which of the following statements describes a **disadvantage** of AMTSL?
  - a) It requires the presence of a skilled birth attendant who can administer injections.
  - b) It increases the amount of blood loss after childbirth.
  - c) It increases the risk of PPH during the third stage of labor.
  - d) It increases the length of the third stage of labor.

### Review of uterotonic drugs

- 3) Which of the following statements about oxytocin is not true?
  - a) Oxytocin acts within 6 to 7 minutes.
  - b) Oxytocin has few or no side effects.
  - c) Oxytocin is more stable than ergometrine when exposed to heat.
  - d) Oxytocin is more stable than ergometrine when exposed to light.
  
- 4) Uterotonic drugs...
  - a) can be used to stimulate contractions
  - b) are used to treat postpartum hemorrhage
  - c) help prevent uterine atony after childbirth
  - d) All of the above
  
- 5) If the health facility does not have a refrigerator:
  - a) Oxytocin may be stored outside the refrigerator at a maximum of 30°C for no more than two weeks.
  - b) Oxytocin may be stored outside the refrigerator at a maximum of 30°C for no more than three months.
  - c) Oxytocin may be stored outside the refrigerator at a maximum of 30°C for no more than one week.
  - d) None of the responses is correct.

- 6) If a skilled birth attendant is not present at the birth:
- a) Oxytocin or misoprostol may be administered in the absence of AMTSL
  - b) AMTSL should still be practiced because it prevents PPH
  - c) Physiologic management of the third stage of labor should be practiced
  - d) (a) and (c)
- 7) WHO recommends oxytocin as the uterotonic drug of choice because:
- a) It is fast-acting
  - b) It is inexpensive
  - c) In most cases, it has no side effects or contraindications for use during the third stage of labor
  - d) It is more stable than ergometrine in hot climates and light
  - e) All of the above

### **Prevention of PPH**

- 8) Which of the following can prevent the uterus from contracting properly?
- a) Clamping of the cord too quickly after childbirth
  - b) Emptying the bladder before placenta separation
  - c) Failure of the placenta to separate from the uterus
  - d) Failure to wait at least 15 minutes before massaging the uterus after the placenta has delivered
- 9) Up to two-thirds of PPH cases:
- a) can be predicted if women's risk factors are identified during pregnancy
  - b) occur in women who have no risk factors
  - c) can be predicted if a thorough history is taken when the woman comes to the health facility in labor
  - d) can be predicted by experienced skilled birth attendants
- 10) The most important factor in determining a woman's chances of surviving PPH is:
- a) the woman's parity
  - b) early diagnosis and management of PPH
  - c) identification of risk factors during pregnancy
  - d) identification of risk factors when a woman comes to the health facility to give birth
- 11) Screening for, preventing, and treating anemia during pregnancy can:
- a) prevent PPH
  - b) reduce the risk of dying from PPH
  - c) make AMTSL less risky
  - d) all of the responses are correct

**AMTSL**

- 12) Active management of the third stage of labor includes all of the following EXCEPT:
  - a) Massage the uterus
  - b) Apply upward pressure on the uterus with a contraction
  - c) Wait for signs of placenta separation (e.g., lengthening of the cord)
  - d) Give a uterotonic drug within one minute after birth
- 13) The main risk in performing active management of the third stage is:
  - a) Retained placenta
  - b) Pulling the cord off
  - c) Causing uterine atony
  - d) None of the above
- 14) Controlled cord traction is only applied when countertraction is applied simultaneously because:
  - a) Countertraction helps the placenta descend into the vagina.
  - b) Countertraction supports the uterus and helps prevent uterine inversion during controlled cord traction.
  - c) Countertraction reduces pain caused when controlled cord traction is applied.
  - d) Countertraction reduces the risk of maternal-to-child transmission of HIV.
- 15) If the placenta does not descend during 30–40 seconds of controlled cord traction:
  - a) Consider placenta accreta and prepare the patient for a surgical intervention.
  - b) Do not continue to pull on the cord; gently hold the cord and wait until the uterus is well contracted again.
  - c) Administer a second injection of oxytocin 10 IU IM.
  - d) Administer a different uterotonic because the first uterotonic was not effective.
- 16) Performing AMTSL:
  - a) will prevent all cases of PPH
  - b) cannot prevent all cases of PPH
  - c) may increase the risk of PPH due to uterine inversion
  - d) will only prevent PPH in women with risk factors for PPH
- 17) Active management decreases:
  - a) the incidence of postpartum hemorrhage
  - b) the length of third stage of labor
  - c) the percentage of third stages of labor lasting longer than 30 minutes
  - d) all of the responses are correct

- 18) The umbilical cord should be cut:
- a) As soon as possible after birth of the baby to facilitate AMTSL and immediate newborn care
  - b) Immediately after birth of the baby if the newborn requires resuscitation
  - c) After the placenta is delivered to ensure transfer of blood to the newborn
  - d) At a time determined by cultural beliefs

**Monitoring during the immediate postpartum period**

- 19) Ms. A gave birth to a healthy baby girl one hour ago. You managed the third stage of labor actively, the placenta was complete, and she had no perineal or vaginal lacerations. How often should you monitor her uterus and vaginal bleeding during the second hour after delivery of the placenta?
- a) Every 10 minutes
  - b) Every 15 minutes
  - c) Continuously
  - d) Every 60 minutes
- 20) Baby A was born at 3:15 pm. She did not require resuscitation and has already begun breastfeeding. It is now 6:30 pm. How often will you monitor her temperature?
- a) Every 10 minutes
  - b) Every 15 minutes
  - c) Continuously
  - d) Every 60 minutes



## KEY Mid-Course Questionnaire: AMTSL

### Scientific evidence

- 1) Which of the following statements describes an **advantage** of physiologic management of the third stage of labor?
  - a) It increases the length of the third stage of labor.
  - b) **It does not interfere with the normal process of labor and childbirth.**
  - c) It reduces the risk of PPH.
  - d) It reduces average amount of blood loss.
- 2) Which of the following statements describes a **disadvantage** of AMTSL?
  - a) **It requires the presence of a skilled birth attendant who can administer injections.**
  - b) It increases the amount of blood loss after childbirth.
  - c) It increases the risk of PPH during the third stage of labor.
  - d) It increases the length of the third stage of labor.

### Review of uterotonic drugs

- 3) Which of the following statements about oxytocin is not true?
  - a) **Oxytocin acts within 6 to 7 minutes.**
  - b) Oxytocin has few or no side effects.
  - c) Oxytocin is more stable than ergometrine when exposed to heat.
  - d) Oxytocin is more stable than ergometrine when exposed to light.
- 4) Uterotonic drugs...
  - a) can be used to stimulate contractions
  - b) are used to treat postpartum hemorrhage
  - c) help prevent uterine atony after childbirth
  - d) **All of the above**
- 5) If the health facility does not have a refrigerator:
  - a) Oxytocin may be stored outside the refrigerator at a maximum of 30°C for no more than two weeks.
  - b) **Oxytocin may be stored outside the refrigerator at a maximum of 30°C for no more than three months.**
  - c) Oxytocin may be stored outside the refrigerator at a maximum of 30°C for no more than one week.
  - d) None of the responses is correct.

- 6) If a skilled birth attendant is not present at the birth:
- a) Oxytocin or misoprostol may be administered in the absence of AMTSL
  - b) AMTSL should still be practiced because it prevents PPH
  - c) Physiologic management of the third stage of labor should be practiced
  - d) **(a) and (c)**
- 7) WHO recommends oxytocin as the uterotonic drug of choice because:
- a) It is fast-acting
  - b) It is inexpensive
  - c) In most cases, it has no side effects or contraindications for use during the third stage of labor
  - d) It is more stable than ergometrine in hot climates and light
  - e) **All of the above**

### **Prevention of PPH**

- 8) Which of the following can prevent the uterus from contracting properly?
- a) Clamping of the cord too quickly after childbirth
  - b) Emptying the bladder before placenta separation
  - c) **Failure of the placenta to separate from the uterus**
  - d) Failure to wait at least 15 minutes before massaging the uterus after the placenta has delivered
- 9) Up to two-thirds of PPH cases:
- a) can be predicted if women's risk factors are identified during pregnancy
  - b) **occur in women who have no risk factors**
  - c) can be predicted if a thorough history is taken when the woman comes to the health facility in labor
  - d) can be predicted by experienced skilled birth attendants
- 10) The most important factor in determining a woman's chances of surviving PPH is:
- a) the woman's parity
  - b) **early diagnosis and management of PPH**
  - c) identification of risk factors during pregnancy
  - d) identification of risk factors when a woman comes to the health facility to give birth
- 11) Screening for, preventing, and treating anemia during pregnancy can:
- a) prevent PPH
  - b) **reduce the risk of dying from PPH**
  - c) make AMTSL less risky
  - d) all of the responses are correct

**AMTSL**

- 12) Active management of the third stage of labor includes all of the following EXCEPT:
- Massage the uterus
  - Apply upward pressure on the uterus with a contraction
  - Wait for signs of placenta separation (e.g., lengthening of the cord)**
  - Give a uterotonic drug within one minute after birth
- 13) The main risk in performing active management of the third stage is:
- Retained placenta
  - Pulling the cord off
  - Causing uterine atony
  - None of the above**
- 14) Controlled cord traction is only applied when countertraction is applied simultaneously because:
- Countertraction helps the placenta descend into the vagina.
  - Countertraction supports the uterus and helps prevent uterine inversion during controlled cord traction.**
  - Countertraction reduces pain caused when controlled cord traction is applied.
  - Countertraction reduces the risk of maternal-to-child transmission of HIV.
- 15) If the placenta does not descend during 30–40 seconds of controlled cord traction:
- Consider placenta accreta and prepare the patient for a surgical intervention.
  - Do not continue to pull on the cord; gently hold the cord and wait until the uterus is well contracted again.**
  - Administer a second injection of oxytocin 10 IU IM.
  - Administer a different uterotonic because the first uterotonic was not effective.
- 16) Performing AMTSL:
- will prevent all cases of PPH
  - cannot prevent all cases of PPH**
  - may increase the risk of PPH due to uterine inversion
  - will only prevent PPH in women with risk factors for PPH
- 17) Active management decreases:
- the incidence of postpartum hemorrhage
  - the length of third stage of labor
  - the percentage of third stages of labor lasting longer than 30 minutes
  - all of the responses are correct**

- 18) The umbilical cord should be cut:
- a) As soon as possible after birth of the baby to facilitate AMTSL and immediate newborn care
  - b) **Immediately after birth of the baby if the newborn requires resuscitation**
  - c) After the placenta is delivered to ensure transfer of blood to the newborn
  - d) At a time determined by cultural beliefs

**Monitoring during the immediate postpartum period**

- 19) Ms. A gave birth to a healthy baby girl one hour ago. You managed the third stage of labor actively, the placenta was complete, and she had no perineal or vaginal lacerations. How often should you monitor her uterus and vaginal bleeding during the second hour after delivery of the placenta?
- a) Every 10 minutes
  - b) **Every 15 minutes**
  - c) Continuously
  - d) Every 60 minutes
- 20) Baby A was born at 3:15 pm. She did not require resuscitation and has already begun breastfeeding. It is now 6:30 pm. How often will you monitor her temperature?
- a) Continuously
  - b) Every 15 minutes
  - c) Every 30 minutes
  - d) **Every 60 minutes**



## Alternate Mid-Course Questionnaire: AMTSL

### Instructions:

Read each question carefully before choosing a response. Choose only ONE response for each question. If you do not understand a question or response, ask one of the facilitators to assist you before you respond to the question.

### MULTIPLE CHOICE

Circle the best response for each question. Each question is worth 1 point.

#### Scientific evidence

- 1) Which of the following statements describes a **disadvantage** of physiologic management of the third stage of labor?
  - a) It increases the length of the third stage of labor.
  - b) It does not interfere with the normal process of labor and childbirth.
  - c) It reduces the risk of PPH.
  - d) It reduces average amount of blood loss.
- 2) Which of the following statements describes an **advantage** of AMTSL?
  - a) It requires the presence of a skilled birth attendant who can administer injections.
  - b) It reduces the amount of blood loss after childbirth.
  - c) It increases the risk of PPH during the third stage of labor.
  - d) It increases the length of the third stage of labor.

#### Review of uterotonic drugs

- 3) Under ideal condition, oxytocin should be stored :
  - a) In a refrigerator, between 2–8°C
  - b) In an open kidney dish in the delivery room
  - c) In a drawer in the midwife's office
  - d) in a coat pocket to facilitate its use
- 4) Which of the following statements about augmentation of labor is **false** :
  - a) Labor should be augmented only if clear emergency or obstetric conditions are present, and a physician is readily available to perform a cesarean delivery should complications arise.
  - b) If a woman requires augmentation of labor, she should be immediately referred to a health care facility with the capacity to perform a cesarean operation.
  - c) Oxytocin can be safely administered IM in labor if accompanied by an antispasmodic medication
  - d) If oxytocin is used for labor augmentation, it should be administered by controlled IV drip in a health facility that has an operating theater and qualified physician to perform an emergency caesarean operation

- 5) Which of the following statements about oxytocin is true :
- Oxytocin acts within 6 to 7 minutes.
  - Oxytocin is associated with the following side effects: chills and elevated temperature
  - Oxytocin is less stable than ergometrine when exposed to heat or light.
  - Oxytocin has no known contraindications for postpartum use
- 6) If the health facility does not have a refrigerator:
- Oxytocin may be stored outside the refrigerator at a maximum of 40°C for no more than three months.
  - Unrefrigerated transport of oxytocin is possible if no more than six weeks at 30-50°C
  - Unrefrigerated transport of ergometrine is possible if kept **in the dark** and for no more than one month at 30°C.
  - None of the responses is correct
- 7) Which of the following elements need to be checked to ensure that oxytocin has not lost its effectiveness:
- The expiry date written on the ampoule
  - The color of the product
  - The drug company that produced it
  - The route of administration as written on the ampoule

### Prevention of PPH

- 8) The most important factor in determining a woman's chances of surviving PPH is:
- the woman's parity
  - early diagnosis and management of PPH
  - identification of risk factors during pregnancy
  - identification of risk factors when a woman comes to the health facility to give birth
- 9) Which of the following statements is **true**:
- The majority (two-thirds) of PPH cases can be predicted by screening for risk factors during pregnancy
  - The majority (two-thirds) of PPH cases can be predicted by conducting a thorough history when women present at the health care facility in labor
  - The majority (two-thirds) of women who have PPH have no risk factors
  - The majority (two-thirds) of PPH cases can be predicted if the provider has enough labor and delivery experience
- 10) Which of the following care should be provided routinely to all women to prevent PPH and ensure its early diagnosis and management:
- Using the risk factor approach to identify women at high risk of suffering PPH
  - Developing a birth preparedness and complication readiness plan during pregnancy
  - Augmenting labor when the cervical dilatation is to the left of the alert line
  - Applying AMTSL at all births



- 11) Which of the following statements about PPH is **true**:
- a) The importance of a given volume of blood loss varies with the woman's hemoglobin level
  - b) Nearly half of women who deliver vaginally often lose at least 1000 mL of blood
  - c) Blood loss estimates made by providers are usually extremely accurate
  - d) Blood loss of less than 1000 mL will have not effect on women who are not anemic.

### AMTSL

- 12) Controlled cord traction is **not recommended** if :
- a) The provider has not been trained to apply it
  - b) The woman did not receive a uterotonic drug after birth of the baby
  - c) Labor was induced using oxytocin
  - d) (a) and (b)
- 13) Controlled cord traction should never be applied except if countertraction is applied simultaneously because:
- a) Countertraction helps the placenta descend into the vagina.
  - b) Countertraction supports the uterus and helps prevent uterine inversion during controlled cord traction.
  - c) Countertraction reduces pain caused when controlled cord traction is applied.
  - d) Countertraction reduces the risk of maternal-to-child transmission of HIV.
- 14) Active management of the third stage of labor includes which of the following elements:
- a) Wait for signs of placental separation (e.g., lengthening of the cord)
  - b) Administer a uterotonic drug after delivery of the placenta
  - c) Immediately clamp the cord after birth of the baby
  - d) Controlled cord traction with simultaneous countertraction
- 15) If the placenta does not descend after 2 attempts of controlled cord traction:
- a) Consider placenta accreta and prepare the patient for a surgical intervention.
  - b) Do not continue to pull on the cord; gently hold the cord and wait until the uterus is well contracted again.
  - c) Administer a second injection of oxytocin 10 IU IM.
  - d) Administer a different uterotonic because the first uterotonic was not effective.
- 16) What should a skilled birth attendant rule out before administering a uterotonic drug?
- a) Pulsation of the umbilical cord
  - b) Uterine contractedness
  - c) The presence of another baby
  - d) Signs of placenta separation (e.g., lengthening of the cord)

- 17) Which of the following statements about cutting the cord is **true**:
- a) Delaying cord clamping will interfere with the application of AMTSL
  - b) The practice of waiting to clamp the cord until at least 2 to 3 minutes after birth of the baby has proven beneficial to the baby as it results in higher hemoglobin and hematocrit values and possibly lower levels of early childhood anemia and greater iron stores.
  - c) Cutting the cord assists with separation of the placenta from the uterine wall
  - d) Waiting more than 30 seconds to cut the cord is only helpful for premature infants
- 18) In the context of prevention of PPH, if the birth attendant cannot administer oxytocin then management of the third stage of labor will include the following elements:
- a) Wait for signs of placental separation (e.g., lengthening of the cord)
  - b) Early cord clamping
  - c) Controlled cord traction
  - d) Uterine massage to facilitate separation of the placenta from the uterine wall

### **Monitoring in the immediate postpartum period**

- 19) Ms A just gave birth to a health baby boy. Her perineum is intact. How often should the provider monitor the woman's vaginal bleeding during the third hour after giving birth?
- a) every 10 minutes
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  - c) every 30 minutes
  - d) every 60 minutes
- 20) If a woman gave birth at 1:00 pm and it is now 1:15 pm, how often should the provider monitor her new baby's temperature?
- a) every 10 minutes
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## KEY Alternate Mid-Course Questionnaire: AMTSL

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### MULTIPLE CHOICE

Circle the best response for each question. Each question is worth 1 point.

#### Scientific evidence

- 1) Which of the following statements describes a **disadvantage** of physiologic management of the third stage of labor?
  - a) **It increases the length of the third stage of labor.**
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  - b) **It reduces the amount of blood loss after childbirth.**
  - c) It increases the risk of PPH during the third stage of labor.
  - d) It increases the length of the third stage of labor.

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# Facilitator's Tools

## Training report form

### Participants and Results

Training Dates: \_\_\_/\_\_\_/\_\_\_ - \_\_\_/\_\_\_/\_\_\_

Name	Profession	Previous experience with AMTSL	Place of work	Knowledge Assessment		Skill Assessment	
				Pre-Course	Final	Pre-Clinical	Final





## Documents, Forms, and Equipment Needed for 3-Day AMTSL Training

TOPIC	WHEN NEEDED	DOCUMENT / FORM / EQUIPMENT	NUMBER OF COPIES		
			Participants	Facilitators	Total
<b>Preparation/ registration</b>	Before training begins	Notepad, pencil, pen, ruler, eraser			
		Name tags			
		Registration forms			
		Pre-course questionnaire			
		Mid-course questionnaire			
		Schedule			
		AMTSL Training Objectives			
		AMTSL Reference Manual			
		AMTSL Participant's Notebook			
		AMTSL Facilitator's Guide			
		Flipchart and markers			
		Extra flipchart paper if presenting on charts			
Overhead or LCD projector					
<b>Supplies for each topic</b>	Before the topic is presented	Core Topic 1: Review of third stage of labor and evidence for AMTSL			
		Core Topic 2: Causes and prevention of PPH			
		Core Topic 3: Uterotonic drugs			
		Core Topic 4: Steps in AMTSL			
		Additional Topic 1: Infection prevention			
		Additional Topic 2: Birth-preparedness and complication-readiness plans			
		Additional Topic 3: Management of selected complications during the third stage of labor			





## Facilitator responsibility list

### AMTSL Training Program

RESPONSIBILITY	FACILITATOR(S)
<i>Preparation</i>	
1. Prepare staff in clinical site (ideally done several weeks before the training is to occur).	
a. Give information on class dates, size, when on ward, focus of clinical time.	
b. Ask for assistance/cooperation.	
c. Ensure sufficient supplies for participants when on the units.	
d. Work with staff to ensure high-quality care provided (so staff role models skills/protocols taught in training program).	
2. Do inventory of teaching equipment, supplies, and documents and replace as needed.	
3. Arrange meals, snacks, accommodation.	
4. Prepare classroom (clean, enough desks/chairs, whiteboard/pens, overhead/video machines available).	
5. Make copies of all learning materials needed: Reference Manuals, Participant's Notebooks, Facilitator's Guides, Pre- and Mid-Course Questionnaires, answers to learning activities.	
6. Prepare materials needed for demonstrations.	
<i>Administrative and evaluation responsibilities</i>	
1. Welcome participants as they arrive.	All
2. Pass out registration form, Participant's Notebook, Reference Manual.	
3. Pre-/mid-course knowledge assessment.	
4. Skill evaluations (first day, before clinical, and last day).	All

<b>RESPONSIBILITY</b>	<b>FACILITATOR(S)</b>
5. Orientation	
a. Opening, welcome	
b. Registration	
c. Introductions	
d. Workshop ground rules	
e. Training objectives	
f. Orientation to learning materials	
g. Schedule	
h. Team system	
i. Using checklists	
6. Arrange certificates.	
7. Review participant training evaluation and closing.	All
8. Write Training Report.	
9. Arrange/attend Facilitator Meeting every _____ months.	All
<b>Teaching responsibilities</b>	
Core topic 1: Review of the third stage of labor and evidence for AMTSL	
Core Topic 2: Causes and Prevention of PPH	
Core Topic 3: Uterotonic Drugs	
Core Topic 4: Steps in AMTSL	1 facilitator per 4 participants during practice session



<b>RESPONSIBILITY</b>	<b>FACILITATOR(S)</b>
Additional Topic 1: Infection Prevention	
Additional Topic 2: Birth-Preparedness and Complication-Readiness Plans	
Additional Topic 3: Management of Selected Complications During the Third Stage of Labor	
Orientation to clinical areas	
Clinical sessions	1 facilitator per 2–4 participants during clinical sessions
<i>Facilitators</i>	
Overall responsibility for Day 1	
Overall responsibility for Day 2	
Overall responsibility for Day 3	
Overall responsibility for clinical practice	
Overall responsibility for administrative documents	

## Slide References

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[http://library.med.utah.edu/nmw/mod2/Tutorial2/uterine\\_vessels\\_fig71.html](http://library.med.utah.edu/nmw/mod2/Tutorial2/uterine_vessels_fig71.html). Accessed April 2, 2007.

- CT1-2:

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- CT4-5, CT4-7, CT4-8, CT4-13

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- CT4-6, CT4-9, CT4-11, CT4-12

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- CT1-3, CT1-4, CT4-10

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- AT3-20, AT3-21, AT3-27

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<sup>2</sup> AbouZahr C. Antepartum and postpartum haemorrhage. In: Murray CJL, Lopez AD, eds. *Health Dimensions of Sex and Reproduction*. Boston, MA: Harvard University Press; 1998:165–190.

<sup>3</sup> Stephenson P. Active Management of the Third Stage of Labor: A Simple Practice to Prevent Postpartum Hemorrhage. USAID Global Health Technical Brief. June 2005. MAQ website. Available at: <http://www.maqweb.org/techbriefs/tb13activemgmt.shtml>. Accessed April 2, 2007.

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<sup>5</sup> Prendiville WJ, Harding JE, Elbourne DR, Stirrat GM. The Bristol third stage trial: active versus physiological management of the third stage of labour. *British Medical Journal*. 1988;297:1295–1300.

<sup>6</sup> JHPIEGO/MNH. *Managing complications in pregnancy and childbirth Learning Resource Package: A guide for teachers*. Accessed April 4, 2007. [http://www.reproline.jhu.edu/english/2mnh/2mcpc/learningpkg\\_toc.htm](http://www.reproline.jhu.edu/english/2mnh/2mcpc/learningpkg_toc.htm)

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