

Module 4 : First Examination of the Newborn

Session 2 : How to measure the newborn temperature

Day : 2

Time Required : 1 hour and 25 minutes

Purpose

To prepare ASHAs to use digital thermometers for measuring a newborn's temperature.

Objective

At the end of the session the ASHA will be able to:

1. Use a digital thermometer to determine a newborn's temperature correctly.

Materials

- Digital Fahrenheit/ Centigrade thermometers.
- Babies or young children, if possible
- Reading Material 1 and Worksheet 1 : Skills Checklist - Measuring Temperature

Preparation

- Try to arrange for a baby or a young child for this session.
- Have enough thermometers available to enable you to give one to each ASHA.
- Ensure availability of adequate copies of Reading Material 1 and Worksheet 1 depending on the number of trainees.

Training Methods

Presentation: Explain thermometer scale (15 minutes)

Instructions to Trainers :

1. Ask if the trainees are familiar with the two different temperature scales: Fahrenheit and Centigrade. Listen to their answers. Which one are they familiar with? Tell them that in this curriculum, we will be using the Fahrenheit scale. Discuss.
2. Explain the Fahrenheit scale: 32° F (0° C)= ice (freezing), 212° F (100° C)= boiling water, 98.6° F (37° C)= human body (newborns).
3. Draw the thermometer scale on the blackboard-from 96° F (35.6° C) - 104° F (40° C) with 9 marks between each number to denote 1/10 of a degree. (see content box)
4. Explain the range of thermometer, usually 91° F (32.8° C) - 105° F (40.6° C).
5. Ask if anyone can tell at what temperature a person has fever?

Content Box :

Fahrenheit Scale

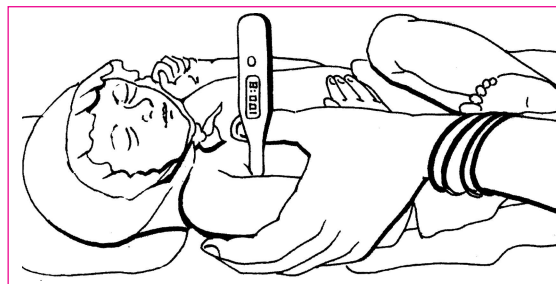
96.....97.....98.....99.....100.....101.....102.....103.....104...

- Each dot represents 1/10th of a degree.
- 97.0° F (36.1° C) to 98.6° F (37.0° C) is considered 'normal'.
- Temperature above 99.0° F (37.2° C) (newborns/children) and 100° F (37.8° C) in adults is considered 'fever' for the purpose of treatment.
- The digital thermometer will display the temperature in the window e.g., 98.2 or 101.8 etc.

Demonstration (20 minutes)

Instructions to Trainers :

1. Distribute the thermometers. This thermometer is used only in the armpit (axilla) not the mouth or rectum.
2. Point out the parts of the thermometer including the 'tip' end, which is placed in the armpit (axilla and NOT in the mouth or rectum) and also the display.
3. Ask ASHAs to refer to the Skills Checklist : Measuring Temperature, Reading Material 1.
4. Read each of the checklist steps out loud. Ensure that trainees are following along in their copy.



Content Box :

Skills Checklist : Measuring Temperature

1. Take the thermometer out of its storage case, hold at broad end and clean the shining tip of the thermometer with a cotton ball soaked in spirit.
 2. Press the pink button once to turn the thermometer on. You will see "188.8" flash in the center of the display window. For 3 seconds, the thermometer will then show the last temperature taken and then three dashes like this - - - and a flashing "F" in the upper right corner.
 3. Place the thermometer upward and place the shining tip in the center of the armpit. Place arm against it. Do not change the position.
 4. You will hear a beep sound every 4 seconds while the thermometer is measuring the temperature. It usually takes 4 minutes for the thermometer to reach the body temperature. When you hear 3 short beeps, look at the display. If "F" is flashing and numbers are changing, leave the thermometer in place. When "F" stops flashing and the numbers stop changing, remove the thermometer.
 5. Read the number in the display window.
 6. On the form, record the temperature reading.
 7. Turn the thermometer off by pushing the pink button once.
 8. Clean the shining tip of the thermometer with a cotton ball soaked in spirit (alcohol).
 9. Place thermometer back in its storage case.
5. Mention that the battery in the thermometer should last three years. If they see this in the display window on the top of the thermometer it means that the battery is dead and needs to be replaced. They should inform the supervisor. If you use another type of thermometer, show the ASHAs how to check if the battery is dead.
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6. Explain each step and answer questions., if any.
 7. Ask for a volunteer; it is preferable if a baby or young child is used for a demonstration.
 8. Take a volunteer's temperature following the checklist steps. Read the step out loud as you perform each step.
 9. Have trainees follow the checklist along with you. In summers, the thermometer takes the atmospheric temperature and may show 99° + temperature in the afternoons when the pink button is pressed. To see the three lines in the display window, place the tip in cold water. In winter the thermometer may fail to record any temperature; then it may be necessary to rub the tip gently.

Practice and Evaluation (45 minutes)

Instructions to Trainers :

1. Divide the group in pairs.
2. Have trainees take each other's temperature, using the checklist as a guide.
3. Have trainees change partners and continue practicing.
4. Have trainees practice on babies or young children, if available.
5. Have each trainee record temperature at least on five individuals and let the peers record the correctness of steps in Worksheet 1.
6. Move around the room checking & assisting wherever needed. Let the practice continue till all steps are performed correctly by all the ASHAs.
7. In the end, the trainer evaluates the skill by recording all steps as they are performed by each ASHA. Performance of each ASHA is recorded on the worksheet and is scored by giving 1 point for each correct step. Trainer saves these checklists as output of the session.

Summary (5 minutes)

- Ask a trainee to demonstrate how to take a baby's temperature.
- Make corrections, if any, and add missing information.
- Praise ASHAs for their good work.

Evaluation of the session (during class)

Objective	Assessment Method	Output
Use a digital thermometer accurately to determine a newborn's temperature correctly.	Trainees practice in class. Everybody demonstrates correctly measuring newborn's temperature.	Trainer evaluates the skill by recording on the worksheet, all steps as they are performed by each ASHA and by giving 1 point for each correct step. Trainer saves these checklists as output of the session.