

# Ministry of Health Hashemite Kingdom of Jordan

# Standards of Care for Health Centers



Volume V **Nursing Care Services** 





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# Volume I Health Center Management



Volume II

# Clinical Case Management



Volume III

# **Reproductive Health**



Volume IV

# **Preventive Services**





Volume V

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Volume VI

**Performance Checklists** 





Ministry of Health Hashemite Kingdom of Jordan

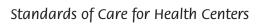
# Standards of Care for Health Centers



Volume V **Nursing Care Services** 







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# **Nursing Care**

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# Introduction

Health for all is an achievable goal for the citizens of the Hashemite Kingdom of Jordan where primary care focuses on providing high quality preventive, promotive, and curative care in a cost-effective manner. The Jordanian Ministry of Health and USAID-funded Primary Health Care Initiatives Project (PHCI) have formed a partnership to reach this goal.

The Standards of Care for Health Centers described here represent a milestone in the road towards better health. They are tangible evidence of the considerable thought and effort that has been devoted to promoting quality of care by the Ministry of Health.

The purpose of the "Standards" is to ensure that health center staff members have the basic and essential guidance required for safe, effective, and humane service delivery. The Standards are contained in five volumes, each addressing a distinct aspect of health center services. A sixth volume of performance checklists is included with the Standards to facilitate self-assessment and performance review. As a set, the Standards are intended to serve as a convenient reference, a guide for service delivery, and a tool to support performance improvement. When following the guidelines set forth in the Standards, members of health center staff are assured that services meet the accepted standard of care required by their communities. The volumes and contents are described below.

## Volume 1: Health Center Management

The Management Standards are organized in four sections. The first section contains job descriptions for staff providing direct and supportive care at health centers. The descriptions are meant to serve as a job aid for those who hold the positions and their supervisors rather than a model for staffing. The second section conveys the expected values and norms for health center services through a description of patient and provider rights and responsibilities. The third section contains the MOH guidance for managing health center accounting procedures and records. The fourth section contains instructions for procurement of drugs, contraceptives, vaccines, and supplies for laboratory and dental services.

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## Volume 2: Case Management

The five clinical problems addressed in the Case Management guidelines are: diabetes mellitus type II, hypertension, acute respiratory infection, asthma, and diarrhea. These conditions represent a significant percentage of the common medical problems encountered at health centers. Detailed guidance for diagnosis and management of each clinical problem is given, including recommendations for drug management, health education, referral, and follow-up care. Algorithms accompanying each clinical problem inform critical diagnostic or management decision-making. Together, these tools provide reference options for both quick and comprehensive review. Performance checklists complete the package for facilitating self-assessment and peer review.

## Volume 3: Reproductive Health

This volume contains guidance for the reproductive health care services typically performed by doctors, nurses, and midwives at primary health centers. Antenatal care focuses on initial assessment and continuing support for pregnant women. The postnatal care section guides follow-up care for new mothers and their infants. Family planning includes guidance for counseling and information on the full range of contraceptive methods available in Jordan. A brief section on HIV/AIDS provides general information, basic education, and prevention messages for the community. All procedures described in the volume are accompanied by performance checklists, which reinforce and highlight the essential skills required for high quality reproductive health services.

#### Volume 4: Preventive Services

This volume addresses two different but complementary aspects of prevention, which are of great importance to the communities served by health centers. The first section covers prevention of childhood diseases through immunization; the second addresses the prevention of infection transmission within the health facility and among clients, staff, and the communities they serve. Immunization guidelines describe management of the cold chain and vaccines, immunization procedures and schedules, roles of staff, recordkeeping, and supervision. Infection prevention includes guidelines for maintaining protective barriers through handwashing, use of gloves and antiseptics, and procedures for decontamination, cleaning, sterilization, and waste disposal. Performance checklists are provided for all important procedures as a guide for self-assessment and performance review.

# Volume 5: Nursing Care

Nursing procedures influence the care of most patients who visit the clinic by supplying the medical information that forms the basis for higher-level medical decisions about care and follow-up. This volume gives special attention to the procedures that are commonly called nursing care, but which are frequently performed by other members of the health center team. Guidance for home visits, child growth and development, immunizations, general care, and first aid is presented. As in the other volumes, performance checklists are included.

# Volume 6: Performance Checklists

The performance checklists presented in each of the five volumes have been compiled in this final volume. These compiled checklists are a convenient tool and job aid for refreshing knowledge, guiding self-assessment, and standardizing performance assessment at the health centers.

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# **List of Acronyms**

**BCG**: Bacilli-Calmette-Guerin vaccine

**BP**: Blood Pressure

**CPR**: Cardiopulmonary Resuscitation

**DPT**: Diphtheria, Pertussis, and Tetanus Vaccine

**DT**: Diphtheria-Tetanus Vaccine

**FIFO**: "First In, First Out"

HIB: Haemophilus Influenza Type B

**IM**: Intramuscular

LAM: Lactational Amenorrhea

**MMR**: Maternal Mortality Rate/Ratio

**ORS**: Oral Rehydration Solution

PHC: Primary Health Care

**TT**: *Tetanus Toxoid immunization* 



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# **Community Family Health**

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# **Community Family Health**

#### Home Visits

The home visit is an opportunity to learn about and get to know the family. Visiting families in their homes provides an opportunity to obtain better information about clients, understand their problems, and develop a stronger rapport with them. It also enables the nurse/midwife to get to know the community in order to be more effective when delivering care at the health center. Clients are often more comfortable discussing problems (particularly personal matters) in their homes than in the health center. Visiting clients in the community is a



than in the health center. Visiting clients in the community is an essential part of nursing care and midwifery. It can also be enjoyable and interesting!

## Objectives

- 1. Observe the family functioning at home and how family members interact with each other.
- 2. Provide health education and guidance regarding determinants of health status; e.g. subjects such as nutrition, immunizations, personal hygiene, safety, and smoking.
- 3. Observe nursing care provided to any sick person in the house and offer guidance.
- 4. Identify risks to health status and offer guidance for health concerns or problems such as bathing newborns, breastfeeding, reducing environmental risks, and prevention of childhood accidents.
- 5. Identify family members at risk, such as pregnant women, sick children or children with physical disabilities, or elderly, and refer as needed.
- 6. Follow-up persons who have not returned to the center for care.

Though services provided during home visits should correspond to the purpose of the visit, take every opportunity to improve and promote the health of the family. For example, if the purpose of the visit is to check the blood pressure of a family member with hypertension, and one of the children is observed to have an upper respiratory infection, the nurse/midwife should attend to the needs of each family member. If a case is serious or high priority, discuss the situation with the mother and/or other family members, taking care NOT to blame or criticize.



## Before Leaving the Health Center:

- Define the purpose of the visit(s)
- Prepare a home visit bag with supplies
- Prepare documents to record observations
- Arrange transportation
- Obtain clients' addresses
- Plan to visit non-communicable clients first

# **Equipment and Supplies**

Include the following in the Home Visit Bag:

- Blood pressure cuff
- Stethoscope
- Thermometer
- Spring weight scale for newborn
- Soap
- Towel
- · Tape measure
- · Handouts on family planning
- Samples of family planning methods

### Bring the following documents on home visits:

- Records for recording observations from home visit
- Plan of action for family health
- Family records and empty cards
- · Pen and notebook



#### When You Arrive:

- Greet client/family members courteously
- Introduce yourself
- State clearly the purpose of your visit
- Do NOT enter a home without the family's permission

# Evaluate the Family's Health and Function

During the first visit, inquire about and note all health services that the family has received from the health center, such as immunization, ante- and postnatal care, and childhood care services.



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#### Assess Each Individual

- Give priority to pregnant and postpartum women, children under five years of age, infants recently weaned, and sick family members.
- Ask women of reproductive age what method of family planning they are using (if any) and if they have any questions about family planning methods.
- Refer any family member with signs or symptoms of a health problem to the health center as appropriate. Give follow-up appointments using the referral form.
- Record actions taken and note dates of follow-up visits.
- Document in the family record important facts and information concerning any individual in the family.
- After providing services, explain briefly to the mother about the health services that you and your colleagues are providing.
- Ask family members about any needs or problems to be discussed during the next visit.

#### Evaluate the Home Environment

- Observe any dangerous conditions or practices in the home environment.
- Discuss with the mother and other family members how and why identified practices or risk factors may be hazardous to the family's health.
- Propose some steps that the family can take to correct dangerous conditions and to prevent problems that may occur.
- Record observations and any actions taken during the visit.
- Record any unusual observations and any recommended actions on the family evaluation form.



Performance Checklist 1: Home Visits

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# Performance Checklist 1: Home Visits

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

- 1	Achieved?		
Task	Yes	No	Comments
All Clients			
Greets client and introduces self in a friendly manner.			
2. Explains purpose of the visit.			
<ul><li>3. For children under age 5, asks about:</li><li>Immunizations</li><li>Breast feeding/weaning</li><li>Growth and development</li></ul>			
<ul><li>4. Asks women about:</li><li>Pregnancy</li><li>Postpartum</li><li>Family planning</li></ul>			
5. Asks about sick family member(s).			
Health Education and Promotion			
<ol> <li>Provides appropriate health education/teaching for:</li> <li>Pregnancy</li> <li>Postpartum</li> <li>Children under 5 years of age</li> <li>Breastfeeding</li> <li>Weaning</li> <li>Family Planning</li> <li>Sick family members</li> </ol>			
Tells client(s) about health center services			
Home Environment			
Observes home environment for health risks			
2. Discusses observations with mother/family members.			
3. Proposes steps to correct situation/ problem			
<ul><li>4. Records:</li><li>Observations</li><li>Actions taken</li><li>Unusual findings</li></ul>			

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# Childhood Growth and Development

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# Childhood Growth and Development

## Monitoring Growth and Nutritional Status

## Objectives

- 1. Determine the weight of newborn, infant, or child two years of age or younger.
- 2. Assess growth, health status, and nutritional needs of infants or children under age two.
- 3. Accurately measure weight--together with the height (length) of infant/child, weight is used to calculate body surface area and thus medication dosages.



NOTE:

Weighing, measuring (checking height and length), and assessing infant development are routine nursing/midwifery procedures. These measurements provide an important opportunity for the nurse/midwife to assess infants' health and to teach mothers and other family members about their children. It is also an effective way to develop a closer relationship with the mother in order to better meet her health care needs. The nurse or midwife should make every mother who brings her infant to the health center feel that her baby is very special.

Talk to the mothers about their problems. Smile and play with the infants while you weigh them, measure them, and assess their development. Show mothers what their infants can do!

#### Equipment and Supplies

- · Weight scale with tray and clean paper cover
- Pen and record for recording measurements

NOTE:

Ensure that room temperature is suitable before undressing an infant, especially in winter.

# Procedures for Weighing Infants

Different types of weight scales can be used to weigh infants. Health centers typically use weight scales with trays or baskets to hold infants. There may also be a portable weight scale that the nurse can take during her home visits. Always wash hands before handling infants.

- 1. Welcome the mother.
- 2. Ask the mother what the purpose of her visit is and inquire about the baby's health and nutrition.
- 3. Review infant card to verify name, age, previous immunizations, and weight and height measurements.
- 4. Explain to the mother the importance of weight measurements for monitoring growth and development.
- 5. Explain the procedure to the mother and ask for her assistance.
- 6. Prepare a clean piece of paper or a towel and place it on scale.
- 7. Check that the weight scale is calibrated. Ensure that the scale registers zero before weighing and rebalance scale if it is not calibrated.
- 8. Ask the mother to remove her infant's clothes, or assist her in doing so.
- 9. Handle infants gently: smile and talk soothingly and do not make quick or abrupt movements when unclothing or carrying infants to and from the scale.
- 10. Watch infants at all times while weighing them.
- 11. Hold one hand closely over (but not touching) infants while weighing them.
- 12. Ensure that the infant is not touched or held when weight is measured.
- 13. Measure weight accurately.
- 14. Immediately record the weight in the appropriate place on infant/child's record.
- 15. Assist the mother in dressing her child.
- 16. Inform the mother about her child's weight and show her on the growth card. Explain the importance of weight to the infant's age and development and ask if she has any questions.
- 17. Provide appropriate health education messages on infant/child nutrition, breastfeeding and LAM, care, hygiene, and vaccinations.
- 18. Inform the mother about the next appointment and write the date on infant record.
- 19. Ask the mother about her own health and what kind of family planning method she is using. Answer any questions or concerns she has and refer for follow-up care, if necessary.
- 20. Ask the mother about her baby's reactions when she talks to him to determine possible problems in hearing.
- 21. Report any unusual finding that may indicate a deviation from normal or from what is expected according to the growth chart to the physician or other responsible person.
- 22. Wash hands thoroughly following the procedure.

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#### **Growth Charts**

Growth charts make it easy to see at a glance whether or not a child is gaining weight normally, so that nurses and midwives can inform parents and take steps to protect the child's health. The nurse/midwife should explain the chart and how to use it to the mother.

The two long, curved lines on the chart are guides that show the range of a healthy child's weight. The child's weight should fall between these lines. In most healthy children, the line of dots (representing the child's weight each month or every few months) rises steadily, following the direction of the curved lines.



Poorly nourished or underweight children are more susceptible to infectious diseases like pneumonia and have more difficulty fighting infections once they are sick.

#### To Use a Growth Chart

- 1<sup>st</sup> Write the months of the year in the squares at the bottom of the chart. Write the month that the infant was born in the first square for each year.
- 2<sup>nd</sup> Weigh the baby.
- 3<sup>rd</sup> Look on the side of the card for the child's weight in kilograms.
- 4th Look for the present month at the bottom of the chart and follow the line that goes out from the weight and up from the month.

Mark a dot where these lines cross. This is the baby's weight.

Each month (or every few months, depending on the infant's age), weigh the baby and add another dot to the chart. Join the dots together with a line.

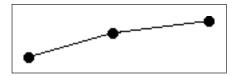
If a child is healthy and eats enough nutritious food, the child should gain weight each month.

Notes:

The direction of the line of dots is more important than whether the dots are inside or below the two curved lines.

## Standards of Care for Health Centers

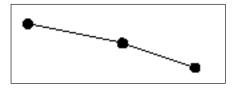
Some children are naturally smaller than others. If the line connecting the dots slants steadily upward (meaning the child is gaining weight), then the child is growing well.



If the line connecting the dots is flat (meaning the child is not gaining weight), talk to the mother and try to determine the reasons why (e.g., the child has been sick, is not eating well, weaned abruptly or too early). It could be the first sign of a problem.



If the line connecting the dots slants downward (meaning the infant is losing weight), the child may be sick or in danger, and needs extra care.



If a child gains weight more slowly than other children, stops gaining weight, or loses weight, the child may not be getting enough to eat, or may have a serious illness, or both.

# Obesity in Infants and Children

A child who is overweight should also be monitored. If a child's weight is consistently above the curved lines on the growth chart, and the height of the child is not above average (children who are much taller than average will probably also show weights above the curved lines), the cause should be investigated. Obesity in children can lead to chronic diseases in adulthood, such as high blood pressure, diabetes, and heart disease.

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0-6 Months	Birth weight doubles
6-12 Months	Birth weight triples by 1 year Average weight at 1 year is 10 kg
1-3 Years	Expected weight gain of 2 kg per year
3-5 Years	Weight gain of less than 2 kg per year Average weight at 5 years is 18 kg

Table 1. Expected Weights for Infants and Children Under 5 Years

# **Developmental Screening**

Developmental screening helps providers identify problems in infants and children at an early stage so that they can be referred for appropriate care. Simple developmental screening should always be done during routine well-child and immunization visits. The nurse/midwife plays an important role in screening, educating, and supporting families. Parents and other family members enjoy learning what their children can do at different ages, and providers should take every opportunity to educate and counsel parents about their children's development, including the preventive measures they can take to enhance their children's health and well being.

# Objective

To identify and refer developmental problems in infants and children at an early stage.

### **Key Points**



- Screening is a preliminary investigation-not definitive
- Referral and further testing by a qualified pediatrician or developmental specialist are necessary to confirm any findings
- If a problem is confirmed, a follow-up and treatment plan should be developed to help parents improve or manage their child's condition

## Equipment for Developmental Testing

Use rattles, blocks, or any brightly colored toys to test babies and infants during visits to the health center. You can make blocks out of discarded cardboard medication boxes by covering them with bright paper. Wooden tongue depressors can be wrapped with bright yarn or material. Balls can be made out of bright string or yarn. Use your imagination! Ask community members or members of your own family to donate toys to use for developmental screening.

"Playing" is how children grow and learn.

Table 2. Developmental Milestones in Newborns and Infants

Age	Milestones
0-3 Months	Can raise head up when lying on stomach Watches hands and feet Reacts to sounds Smiles at mother Attempts to grab objects
3-6 Months	Can roll over from back onto stomach Follows objects in any direction Recognizes persons Can grab object in each hand Begins to imitate sounds
6-9 Months	Sits without help Claps hands Can wave with wrist Says words like "Ma Ma" & "Da Da" Can pass objects with hands
9-12 Months	Stands with help Starts to crawl Puts and takes out objects from a box Grabs with two fingers Pronounces single words Has 2-4 Teeth
1-2 Years	Walks and begins to run Opens and closes doors Associates objects and persons Helps to get him/herself dressed and undressed Knows meaning of some words ("no")
2-3 Years	Jumps using both feet Says short phrases (2-3 word sentences) Draws lines and circles Builds tower with 3-4 blocks States own name

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#### Children At Risk

It is important for nurse/midwives to screen for, identify, and closely monitor children who are considered "high risk" for growth and developmental problems. Early detection and treatment of problems can help prevent serious illness and even death in children.

Infants and children at high risk for growth and developmental problems include those with:

- Birth weight below 2.5 kg
- Brothers or sisters who show signs of malnutrition
- Families with 4 or more children
- Twins or multiple births
- Birthdays less than 2 years after last sibling
- · History of sibling death
- Single mother or father
- Low Apgar score
- Sick baby
- · Complicated labor and delivery

# Measuring the Height of Children Under 2 Years

# Objective

To determine whether a child is within the normal range of height for his or her age.

# **Equipment and Supplies**

- Measuring board or meter, usually calibrated in centimeters.
- Brace for the feet (e.g. box) if a measuring board is not available
- Ruler or measuring square

#### Procedures for Measuring Height

- 1. Wash hands thoroughly.
- 2. Welcome the mother. Ask her what the purpose of her visit is and ask her about her child's health and nutrition.
- 3. Review infant or child's growth card to verify name, age, immunizations received, and previous weight and height measurements.
- 4. Explain procedure to mother and ask her assistance.



- 5. Place a clean towel or paper towel on the measuring surface.
- 6. Smile and talk reassuringly to the infant. Do not make sudden movements and handle the baby gently.
- 7. Place the infant on measuring surface parallel to the measuring ruler. Do not leave the infant because he/she may roll off the table.
- 8. Press soles of feet against an upright structure that is point zero on the ruler.
- 9. Make sure that the infant or child's knees are extended and hold the infant's head face to the ceiling.
- 10. Place the ruler or measuring square against top of head at a right angle to the measure. Note the point on the measuring board to which the ruler comes.
- 11. Record the height on baby's growth card.
- 12. Inform the mother about her infant's height and explain what it means in terms of the infant's age and development. Ask the mother if she has any questions.
- 13. Ask the mother about her own health and what type of family planning she is using. Answer any questions that she has and refer for follow-up, if necessary.

Table 3. Expected Height and Length for Infants and Children Under 5

0-6 Months	Grows approximately 2.5 cm per month At 6 months average length 66 cm
6-12 Months	Grows an average of 1.25 cm per month Height/length increases 50% by 1 year of age
1-3 Years	Height increases by 7.5 cm per year
3-5 Years	Height increases 5-7 cm per year Average height at age 5 years is 108 cm

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# Measuring Head Circumference of Children

## Objective

Screen for abnormal development of the brain e.g. (hydrocephalus) by measuring the rate of growth of the skull.

## **Equipment and Supplies**

- Cloth or soft plastic measuring tape (scaled in cm)
- Pen and record to record measurements

## Procedures for Measuring Head Circumference

- 1. Wash hands thoroughly.
- 2. Welcome mother and ask her the purpose of her visit to the health center.
- 3. Review the infant's card to verify name, age, immunizations and previous height/weight measurements.
- 4. Explain to mother the importance of measuring head circumference is to monitor child's growth and development.
- 5. Explain procedure to mother and ask for her assistance.
- 6. Smile and talk reassuringly to the infant. Handle the infant gently.
- 7. Place infant on a flat table on a clean sheet or towel.
- 8. Place measuring tape over the occipital and frontal prominence (*i.e.* around infant's occipital region and forehead) and take the correct reading.
- 9. Remove the measuring tape.
- 10. Read the measurement on the tape in centimeters.
- 11. Record the reading obtained on child's record.
- 12. Inform and explain to the mother the results you obtained and ask the mother if she has any questions.
- 13. Ask the mother about her own health and what method of family planning she is using. Answer any questions she has and refer her for follow up, if necessary.
- 14. Wash hands thoroughly.

Table 4. Expected Head Circumference for Infants and Children Under Age 5

Birth to 6 Months	Increases 1.2-1.5 cm per month At 6 months health circumference is around 43 cm
6-12 Months	Increases 1.2 cm every 2 months At 1 year head circumference is around 46-50 cm
1-3 Years	Anterior fontanel closed by 15 months Head circumference increases approximately 2.5 cm per year

# Childhood Growth and Development Performance Checklists

Performance Checklist 2:

Monitoring Growth and Nutritional Status

Performance Checklist 3:

Developmental Screening

Performance Checklist 4:

Measuring Height of Children Under 2 Years

Performance Checklist 5:

Measuring Head Circumference of Children Under 2 Years

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# Performance Checklist 2: Monitoring Growth and Nutritional Status

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

Tools	Achieved?		Community
Task	Yes	No	Comments
Greets client and introduces self in a friendly manner.			
2. Asks mother what the purpose of her visit is and inquires about the infant/child's health and nutrition.			
3. Reviews infant's card to verify name, age, previous immunizations, weight and height measurements.			
4. Explains to mother the importance of measuring weight.			
5. Places a clean piece of paper/cloth on the scale for the infant to lie on.			
6. Checks to make sure that the weight scale is calibrated (the scale should register 0 before weighing) and rebalances scale if not calibrated.			
7. Asks mother to assist in removing the infant's clothes.			
8. Talks soothingly to and smiles at the infant and handles the infant gently when placing them on the scale.			
9. Watches the baby constantly and holds one hand closely over the baby (not touching) while weighing him/her.			
10. Measures and records weight accurately.			
11. Shows mother the weight on the growth card, explains the importance of weight to his/her age and development.			
12. Asks mother if she has any questions.			

# Standards of Care for Health Centers

Task	Achieved?		Comments
TUSK	Yes	No	Comments
13. Provides appropriate health education messages on child's nutrition, care, hygiene, and vaccinations.			
14.Informs mother about the next appointment and notes date on infant card/record.			
15.Counsels mother on healthy diet and family planning options.			
16.Reports any unusual finding to the physician.			
17. Washes hands thoroughly.			

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# Performance Checklist 3: Developmental Screening

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

Taal	Achieved?		Comments
Task	Yes	No	Comments
All Clients			
Greets the client and introduces self in a friendly manner.			
2. Asks mother what the purpose of her visit is and inquires about infant/child's health and nutrition.			
3. Reviews infant's card to verify name, age, immunizations, weight and height measurements.			
4. Explains to mother the importance of screening to assess child's development.			
5. Washes hands.			
6. Talks soothingly to and smiles at the infant.			
Development Assessment All Infants/Children			
Asks mother if she has any questions about child's development.			
2. Provides appropriate health education messages on child's growth and development, nutrition, care, hygiene and vaccinations.			
3. Informs mother about the next appointment, notes date on infant card/record.			
Records findings from developmental screening			
5. Notifies physician of any unusual findings			

Tool	Achie	eved?	Communita
Task	Yes	No	Comments
Months 0-3 Checks for all of the following developmental milestones: Raises head when lying on stomach Observes hands and feet Reacts to sounds Smiles at mother Attempts to grab objects			
Months 3-6 Checks for all of the following developmental milestones:  Rolls over from back to stomach Follows objects in any direction Can grab object in each hand Can imitate sounds			
Months 6-9 Checks for all of the following developmental milestones:  • Maintains sitting position without assistance  • Claps hands  • Waves  • Says simple words  • Passes objects with hands			
Months 9-12 Checks for all of the following developmental milestones:     Stands with assistance     Starts to crawl     Puts and takes objects from a box     Grasps with two fingers     Pronounces single words			
<ul> <li>1-2 Years</li> <li>Checks for all of the following developmental milestones:</li> <li>Walking and running</li> <li>Opening and closing doors</li> <li>Ability to assist in dressing</li> <li>Understands simple words like "yes" and "no"</li> </ul>			
2-3 Years Checks for all of the following developmental milestones Jumps with both feet Says 2-3 word sentences Draws line and circle Builds a 3-4 block tower Responds to his/her name.			

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# Performance Checklist 4: Measuring Height of Children Under 2 Years

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

Task	Achie	eved?	Communicate
TUSK	Yes	No	Comments
Greets the client and introduces self in a friendly manner and inquires about the purpose of the visit.			
2. Reviews the child's record			
3. Washes hands			
4. Gently places the child on the clean measuring surface.			
5. Gently but firmly presses the soles of the child's feet against the upright structure that is at point zero on the measuring ruler.			
6. Makes sure that the child's knees are extended.			
7. Correctly measures and records child's height/length on growth card.			
8. Asks mother if she has any questions and gives appropriate health messages.			
9. Informs mother about the next appointment, notes date on infant card/record.			
10. Washes hands.			

# Performance Checklist 5: Measuring Head Circumference of Children

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

Task	Achieved?		Commonto
TUSK	Yes	No	Comments
Greets the client and introduces self in a friendly manner and inquires about the purpose of the visit.			
2. Reviews the child's record.			
3. Washes hands.			
4. Gently places the child on a clean exam table.			
5. Measures the head by placing a measuring tape over the largest axis from the occiput to the frontal prominence			
6. Records the reading on the infant's record and reports any unusual finding to physician.			
7. Informs and explains the reading and asks the mother if she has questions.			
8. Provides appropriate health education messages child nutrition and care.			
9. Inquires about mother's general and reproductive health, answers any questions, and refers for follow-up if necessary.			
10. Washes hands.			

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# **Immunizations**

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# **Immunizations**

# Administering Childhood Vaccines

#### Objective

To protect infants and children from childhood diseases such as diphtheria, pertussis (whooping cough), tetanus, polio, measles, and hepatitis B.

#### **Equipment and Supplies**

A tray containing instruments for measuring and administering vaccines, including:

- Thermometer
- Vaccine vial
- · Cotton swabs moistened with normal saline
- Dry cotton swabs
- Syringes
- Sharps container for used needles
- · Immunization card and record book

# Procedures for Administering Vaccines

- 1. Welcome the mother and ask her about the purpose of her visit.
- 2. Ask the mother if her infant has received the specific vaccine before. Compare information with immunization card to confirm immunization status (previous doses of vaccine and dates).
- 3. Ask mother if she agrees to give her infant or child the vaccine; discuss importance of and different kinds of vaccines and purpose of each, benefits in protecting her child, importance of giving vaccines on time according to prescribed schedule.

### Possible Side Effects of Vaccinations

- Fever
- Irritability
- Local tenderness, swelling, redness, or rash at injection site
- 4. Answer any questions the mother may have about the vaccines. If she agrees to have her infant immunized, do the following:
  - Take the infant or child's temperature. Inform the physician if the temperature exceeds 38°C (typically, the physician will recommend that the infant or child return to receive the immunization when he or she does not have a fever.
  - Ask mother if her child has had any previous reactions to an injection or vaccine.
  - If yes (the child has had a reaction), ask her to specify the nature of the reaction, and consult the physician.
  - *If no (the child has not had a reaction), continue with the immunization.*



- 5. Wash hands thoroughly.
- 6. Prepare the vaccine (make sure it has not expired) and necessary supplies for immunization.
- 7. Except for the polio vaccine, which is given orally (2 drops in the mouth), ask mother to hold her infant for the injection. Talk soothingly to the child, smile and handle the infant gently.
- 8. Lay the infant on the exam table and uncover the vaccination site.

- Inform the Mother About
- Side effects & what to do if they occur
- Date of next vaccination
- Breastfeeding, weaning, and nutrition
- Growth & Development
- Family Planning
- 9. Expose site for injection. (Consult chart for site of each type of vaccine)
- 10. Clean the vaccination site with a cotton swab moistened with normal saline, using a circular motion.
- 11. Administer correct dose of the vaccine.
- 12. Insert needle firmly and quickly through the skin at the chosen site; take the syringe out quickly, holding needle at the base; compress the site with a dry cotton swab or gauze.
- 13. Dispose of the used syringe correctly, preferably into a "sharps" container.
- 14. Return the vial of vaccine to the thermos or refrigerator.
- 15. Wash hands thoroughly.

Table 5. Recommended Immunization Schedule

Vaccine	1st Dose	2nd Dose	3rd Dose	4th Dose	1st Booster	Method of Administration
Polio*	2 months	3 months	4 months	9 months	18-12 months	Two drops in the mouth
DPT & Hepatitis B	2 months	3 months	4 months			Deep IM injection-thigh
DPT					18-24 months	Deep IM Injection-thigh
Measles				9 months		Deltoid
MMR					15 months	Subcutaneous-in the upper part of the arm
HIB (Haemophilus Influenza B)	2 months	3 months	4 months			Deep IM injection-thigh
BCG	5-30 days					Intradermal

<sup>\*</sup>Boosters should be given for polio at age 6 years and for DT at 6 years and 11 years.

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# Administering Tetanus Vaccine to Women

# Objective

To protect women and their unborn children from tetanus.

In Jordan, TT1 is given after three months of pregnancy because pregnant women think that receiving TT vaccine in the first trimester may cause pregnancy loss.

#### Equipment and Supplies

- Anti-tetanus vaccine
- Syringes
- Cotton swabs (moistened with saline)
- Dry cotton swabs
- A container for used swabs

#### Procedures for Administering Tetanus Vaccine

- 1. Welcome the mother and ask her the reason for her visit.
- 2. Wash hands thoroughly.
- 3. Prepare equipment and supplies.
- 4. Explain the procedure to the woman and assure her consent.
- 5. Prepare the right dose of tetanus vaccine (0.5 ml). Check to make sure it has not expired.
- 6. Rub the injection site (the external upper part of the arm) with a cotton swab moistened with normal saline.
- 7. Use your left hand to stretch the muscles of the arm.
- 8. Insert the needle into the muscle.
- 9. Inject the vaccine into the muscle.
- 10. Draw the needle back and press the injection site with a dry cotton swab.
- 11. Educate the woman about the importance of the tetanus vaccine, the doses she should receive and when.
- 12. Wash hands thoroughly.
- 13. Record the date of the vaccination in the record book and on the vaccination card write the date of the vaccination and date of the next dose.



Table 6. Dose and Schedule for Tetanus Toxoid

Dose	Schedule	
π1	At first contact or as early as possible during pregnancy	
ТТ2	4 weeks after TT1	
ТТ3	6-12 months after TT2, or during subsequent pregnancy	
ТТ4	1-3 years after TT3, or during subsequent pregnancy	
ТТ5	1-5 years after TT4, or during subsequent pregnancy	

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# **Immunization Performance Checklists**

Performance Checklist 6: Administering Childhood Vaccines

Performance Checklist 7: Administering Tetanus to Women

# Performance Checklist 6: Administering Childhood Vaccines

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

Tools	Achi	eved?	Canana
Task	Yes	No	Comments
Greets the client and inquires about the child's health.			
Asks mother if infant has received the specific vaccine before and compares information with immunization card.			
3. Explains to mother the importance of the vaccine schedule and purpose of the vaccination(s) to be given.			
4. Asks mother if she agrees to give her infant the vaccine and if she has any questions.			
5. Washes hands.			
6. Takes the child's temperature and informs the physician if the temperature exceeds 38°C.			
7. Asks mother if child has had reactions to previous immunizations and refers to physician if answer is yes.			
8. Prepares the vaccine and checks the expiration date.			
9. Asks mother to hold her child.			
10.Smiles and talks soothingly to the child while uncovering the injection site.			
11.Cleans the injection site.			
12.Administers and records the immunization.			
13.Disposes the used syringe correctly.			

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Task	Achieved?		Community
TUSK	Yes	No	Comments
14.Informs mother about signs of side effects and what actions to take if they occur.			
15.Informs mother about the next appointment, notes date on infant chart/record.			
16. Provides appropriate health messages/education on child's nutrition, care, hygiene, and vaccinations.			
17. Asks mother about her own general and reproductive health, and refers her for follow-up if necessary.			
18. Washes hands.			

# Performance Checklist 7: Administering Tetanus to Women

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

Tools	Achieved?		Causananha	
Task	Yes	No	Comments	
Greets the woman and confirms the purpose of the visit.				
2. Reviews client's record.				
3. Explains the purpose of the vaccination and the dose schedule.				
4. Asks the woman if she has any questions.				
5. Washes hands.				
6. Checks the vaccine expiration date and prepares the injection.				
7. Cleans the injection site (the external upper part of the arm).				
8. Administers and records the vaccination.				
9. Informs the client when she should return for her next dose or follow-up visit.				
10. Asks the client if she has any questions.				
11. Asks the client about her own general and reproductive health and refers her for follow-up if necessary.				

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# General Care and First Aid

# Sterile Dressing

# Objective

To prevent contamination and provide sterile covering for open wounds.

# **Equipment and Supplies**

A sterile wound dressing package with:

- Bowl
- 2 forceps
- · 2 small containers
- Cotton balls
- Gauze 5 x 5 cm

#### Other supplies:

- Adhesive tape
- Disinfecting solution
- Disposable and surgical gloves
- A pair of scissors
- Garbage basket
- Plastic bag

#### Sterile Dressing Procedures

#### Preparation

- Respect the patient's privacy by closing the door and curtains.
- Explain to the patient what you are going to do.
- Wash your hands.
- Put the patient in a comfortable position to examine the wound.
- Expose only the area around the wound, and keep the rest of the body covered.
- Move the dressing trolley next to the patient so you can reach supplies easily.
- Unwrap the external cover of the sterile pack without touching its inner surface.
- Affix a trash bag at the trolley's edge with a piece of adhesive tape.



#### Removing an Old Dressing

- Put on disposable gloves and gently remove the adhesive tape.
- Take off the old dressing and throw it in the trash bag.
- Take note of wound's condition (size, smell, secretions and healing).
- · Remove and dispose of the disposable gloves.
- · Wash your hands.

#### Cleaning the Wound

- Unwrap the dressing package by touching only the sterile side.
- · Pour the disinfectant into a small container.
- Open the gauze or cotton packs without touching the inner surface.
- Wear surgical gloves.
- Wrap a gauze or cotton piece around the forceps.
- Immerse the gauze or cotton in the disinfectant and squeeze it by pressing it against the container's wall, or by using the second forceps.
- Clean the wound from the less contaminated area toward the more contaminated area (and from top to bottom).
- If the wound goes downward, clean it only once with the same gauze.
- Throw the soiled gauze into the trash, take another piece of gauze, immerse it in the disinfectant and clean around the wound. Continue in the same manner until the wound and surrounding area are clean.
- If wound edges are irregular, clean the wound from the center outward in a circular motion. Change the gauze every time.
- If the wound is infected, clean the surrounding area first, then the wound itself.
- Dry the wound in the same way you have cleaned it. If there is a drainage opening near the wound, clear around it in circular movements using another gauze. Clean the drainage opening from the bottom up.

#### Redressing the Wound

- Cover the wound and the drainage opening with a piece of gauze proportional to the size of the wound.
- Take off the gloves correctly and throw them in to the trash
- Use the adhesive tape to fix the gauze.
- Put the instruments back after cleaning and sterilizing them.
- · Wash your hands.

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# Administering Intravenous (IV) Fluids and Medications

## Objective

To establish an intravenous route for administration of drugs and fluids.

#### **Equipment and Supplies**

- The solution, according to physician's order
- Infusion set
- Stand to hang solution
- Fluid recording form (intake and output chart)
- Clean container or tray containing:
  - Venous solution, prepared for the patient
  - Alcohol
  - Cotton swabs
  - Iodine solution to clean injections site
  - Needle of appropriate size
  - Dressing package
  - Sterile dressing gauze 2x2 cm or a bandage with adhesive tape
  - Label for the solution bag

ALWAYS check the dose of any medication before giving it. NEVER give a medication without knowing what it is, what the possible side effects are, and whether or not the patient has any allergies to medications.

When In Doubt, **ALWAYS** Check Before Giving Medication To A Patient



#### **IV Procedures**

#### Preparations

- Check the instructions carefully.
- Identify the required solution for its volume and type, check the solution bag for any defect, turbidity, foreign bodies and expiration date.
- Prepare all the supplies and put them on a tray.
- · Wash your hands.
- Assure the patient and explain what you are going to do.

#### Starting the IV

- Choose the appropriate size needle for the venous solution.
- Connect the bag/bottle to the tubes, let in the fluid to displace the air in the tubes and cover the ends. DO NOT TOUCH the ends of the tubes, nor the sterile surface of the bottle (the opening).
- Raise the head of the bed if necessary so that the patient will be comfortable.
- Wrap the rubber tourniquet around the patient's arm 10-15 cm above the injection site.
- Choose a suitable site for the injection; ask the patient to open and close hand, watch and check the arm for a suitable vein.
- Prepare the injection site by cleaning it with iodine solution, using a circular movement from the injection point outward, wait two minutes until it dries, then clean with alcohol to remove the iodine solution. If the patient is highly sensitive to iodine, use 70% alcohol instead.
- Fix/stabilize the vein with your other hand by pulling the skin over it.
- Hold the needle with its opening up, at an angle of 30-45° to the skin surface and at a distance of 1 cm from the injection site. Do not puncture the vein yet.
- Reduce the angle (until the needle is almost parallel to the skin surface) then insert the needle into the vein in the injection site or directly above it.
- If the blood flows, push the needle straight for about 2-3 cm.
- Slowly release the tourniquet and connect the needle with the tube. Open the valve so that the solution can drip.
- Apply sterile gauze beneath the needle hub.
- Fix the needle in place by using adhesive tape.

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- Cover the needle site with sterile gauze or adhesive tape, but do not wrap the tape completely around the limb.
- Connect the solution to the needle shaft and fix a loop of the tube to the adhesive tape over the dressing.

#### **Important Points**

- Observe for side effects of IV treatments
- Palpate site of IV for pain, redness or swelling
- Monitor vital signs
- Continue to monitor the flow rate of the IV solution

## Calculate the Flow of Fluids

• Calculate the rate of dripping and adjust the flow according to the formula below. (The number of drops per minute is the volume of solution needed to be injected multiplied by the number of drops per one milliliter, divided by 60 times the number of hours.):

# of drops per minute =  $\frac{\text{(ml to be injected) X (# of drops in 1 ml (16 drops))}}{60 \text{ X time (in hours)}}$ 

• Label the fluids with the name of the solution, amount, starting time, duration, date and patient's name.

#### Complete and Clean Up

- Make sure the patient is comfortable, assure the patient and ask them if they have any questions.
- Dispose of the used materials and put the needle in the sharp container.
- Note on the observation sheet the site, type of needle, time, date, solution, volume of solution, reaction if any, and flow rate. Sign the sheet.

# Administering Intramuscular (IM) and Subcutaneous Injections

#### Objectives

- 1. Ensure nurses use appropriate procedures in administering injections.
- 2. Ensure proper sterile technique.
- 3. Ensure nurses administer the injection at the correct site.

## **Equipment and Supplies**

- Vials or ampules of sterile medication
- Sterile gauze
- Needle and syringe
- Antiseptic solution
- Distilled water (if vial contains powder)
- Cotton Swabs

### Procedures for IM and Subcutaneous Injections

### Preparation

- Provide privacy.
- · Wash hands.
- Gather and organize the supplies and equipment needed.
- Check the label on the ampules or vial carefully against the medication card or prescription to ensure the correct medication and dosage are proposed.
- Check 5 rights: Patient, Dose, Route, Production Date, Expiration Date

Drug	Route/Site
Ephinerine	Subcutaneous
Insulin	Subcutaneous
Rabies	IM-Deltoid

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#### Drawing Medicine from an Ampoule

- Flick the upper stem of the ampoule several times with a fingernail to make sure all the medication is in the lower part of the vial.
- Place a piece of sterile gauze on the far side of the neck of the ampoule (to protect your fingers) and break/snap off the top by bending it outward.
- Hold the barrel of the syringe in the middle and insert the plunger while maintaining its sterility (except the upper most part which you are holding).
- Attach the needle to the barrel by holding the hub of the needle and maintaining the sterility of the remainder of the needle and tip of the syringe. Most needles have protective caps.
- Remove the cap from the needle and insert the needle into the ampoule.
- Withdraw the amount of drug required for the dosage. If using the entire amount of medication in the ampoule, tilt it slightly on its side to withdraw all of the medication.

#### Drawing Medicine From a Vial

• Mix the solution, if necessary, by rotating the vial between the palms. DO NOT SHAKE THE VIAL.

NOTE:

Some vials contain aqueous suspensions that settle when they stand and need to be mixed.

- Remove the protective metal cap and clean the top of the vial (the rubber part) using a sterile piece of gauze with antiseptic such as 70% alcohol, rubbing it in a rotating motion.
- Remove the cap from the needle and draw up into the syringe an amount of air equal to the volume of the medication to be withdrawn.
- Carefully insert the needle into the vial through the center of the rubber cap, maintaining the sterility of the needle.
- Inject air into the vial while the bevel of the needle is above the surface of the medication.
- Air will allow the medication to be drawn out easily. The bevel is kept above the medication to prevent bubbles, which are dangerous if injected into a vein.

- Invert (turn the vial upside down) and hold it at eye level while withdrawing the correct dosage of the drug into the syringe.
- Withdraw the needle from the vial and replace the cap over the needle, maintaining its sterility.

NOTE:

For vials containing only a powder that require a liquid, such as sterile water, to be added, follow the manufacturer's directions for preparation. It is important to always withdraw an equivalent volume of air from the vial before adding fluid.

#### IM Injection in the Gluteus, Deltoid or Thigh

- Place a small amount of 70% alcohol on a clean cotton swab and rub the spot on the skin with the swab 2-3 times where you are going to insert the needle.
- Fix the needle firmly, holding it at its base (the end that is not pointed) and hold the syringe between the thumb and forefingers.
- Tell the patient you are going to insert the syringe and to take a deep breath.
- Push the needle into the body at the chosen spot quickly and firmly. The needle should go at least 2 cm into the body.
- Withdraw the plunger slightly to make sure there is no blood (you have not entered a vein) and press the plunger slowly until all medicine has gone in.
- Take the syringe out quickly, holding the needle at its base.

# Subcutaneous Injection in the Upper Arm or Forearm (or Abdomen or Thigh)

- Pick up the skin of the forearm with the fingers of your left hand.
- Tell the patient you are going to insert the syringe.
- Push the needle into the skin that is pulled out, so that the needle goes in about 1 cm.
- Once the needle is under the skin, let go of the skin and press on the plunger of the syringe to insert all of the contents into the skin.
- Pull the syringe and needle out holding the needle at its base.
- Wash hands.

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# Measuring Blood Pressure (BP)

Blood pressure (BP) is the force that the blood exerts on blood vessel walls as it flows through them. Blood pressure is expressed in millimeters of mercury (mm Hg).



#### Objectives

- Ensure accurate measurement of patients' BP.
- Ensure accurate monitoring of changes in BP.
- Provide appropriate advice to patients with hypertension.

## **Equipment and Supplies**

- · Sphygmomanometer and stethoscope
- Container with cotton swabs with alcohol
- Pen
- · Vital signs recording form

### Procedures for Measuring Blood Pressure

- 1. Wash hands.
- 2. Organize equipment so that it is easy to reach. Clean the ear fittings of the stethoscope and the drum with alcohol swabs.
- 3. Reassure the patient and explain what you are going to do.
- 4. If the patient is emotionally upset, in pain, or out of breath from physical exertion, wait to measure BP unless it is urgently needed.
- 5. Use a BP cuff that is the appropriate size for the patient. A cuff that is too large or too small will give an inaccurate reading.
- 6. Make sure the patient is in a sitting or supine position with his or her arm supported and extended at heart-level, palm up.
- 7. Roll up the patient's sleeve.
- 8. Wrap the cuff around the arm, 2.5 cm about the elbow joint. The tubes of the cuff should be at the side closest to the elbow. Press the cuff to empty the air.
- 9. Put the sphygmomanometer beside the patient at the level of his/her heart.
- 10. Put three of your fingers (index, middle and ring fingers) over the brachial artery.
- 11. Shut the air pump valve by twisting it clockwise.
- 12. Pump the cuff with air until the brachial pulse cannot be palpated and identify the disappearing point. Continue pumping air for another 30 mm Hg.

- 13. Gently apply the stethoscope disc over the brachial artery and hold it with your thumb or index and middle fingers.
- 14. Let the air out of the cuff at a rate of 2-3 mm Hg per second until the first beat. This is the *systolic* pressure.
- 15. Continue letting the air out until you hear the beats stop, and identify this point. This is the *diastolic* pressure.
- 16. Open the valve completely.
- 17. Unwrap the cuff from the patient's arm, take the stethoscope from your ears, roll down the patient's sleeve and help the patient to get comfortable.
- 18. Tell the patient what his or her BP is and ask if there are any questions.
- 19. Record the systolic and diastolic pressure readings and compare current readings with any prior readings.
- 20. Record results, time, patient's position, and which arm was used to measure BP.
- 21. Answer any questions that the patient has and provide appropriate health education.
- 22. Put the instruments back in their place.
- 23. Wash hands thoroughly.
- 24. Inform the physician about any abnormal results.

#### Patients Who Require Monitoring of BP

- Emergency Patients
- Pregnant women
- Obese patients
- Diabetic patients
- Patients receiving intravenous fluids

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# Measuring Temperature in Infants and Children

#### Objectives

- 1. Acquire a baseline measurement on registration in order to compare with previous readings.
- 2. Detect an increase/change in temperature (high or low) that may signal health problems.



#### **Equipment and Supplies**

- Rectal thermometer (glass thermometer with a short, rounded bulb)
- Electronic thermometer
- Soft tissues (dry cotton to wipe glass thermometer before and after insertion)
- Lubricant (Vaseline to ease insertion of the thermometer)
- · Watch with a second-hand
- Pen & file record (to note infant or child's temperature)

NOTE:

Thermometers with long, slender tips are oral thermometers and should not be inserted into the rectum.

# Procedures for Measuring Temperature

- 1. Welcome the mother and explain the procedure
- 2. Smile at and talk reassuringly to the infant or child
- 3. Remove thermometer from solution and clean with a cotton swab or soft tissue with soap and water. Rinse thermometer under cold water. Clean and wipe dry from the mercury bulb to the end.
- 4. Check level of mercury in thermometer. Shake mercury down, if necessary, by holding the thermometer between thumb and forefinger and flicking wrist sharply downward. Repeat this motion until mercury level is below 35°C.
- 5. Apply lubricant (Vaseline) on a swab and lubricate thermometer: 2.5 cm for a child; 1-2.5 cm for an infant.
- 6. For an infant, lay the infant on his or her back, hold both ankles with one hand, and raise legs to expose the anus.
- 7. With a child, lay the child on his or her left side, with the right leg flexed in a rectangle.

- 8. Use a dry cotton swab to clean the anus is clean.
- 9. Gently and slowly insert the thermometer into the anus: 1 cm for infants; 1.5 cm for children under one year and 2.5 cm for older children. **Do** not force insertion of thermometer or attempt to insert it if the infant/child is unable or unwilling to hold still.
- 10. Hold the thermometer in place for at least 2 minutes.
- 11. Remove the thermometer gently and wipe it to remove lubricant and facilitate reading; clean the anus to remove excess lubricant.
- 12. Help the infant or child assume a comfortable position and have the mother redress the infant.
- 13. To read the temperature, hold the thermometer between thumb and index finger at eye-level and rotate it until the column of mercury comes into view.
- 14. Clean the thermometer with a cotton swab and soap and water and then rinse with water from tip to bulb end.
- 15. Shake the thermometer as described above until the mercury falls below 35°C, and put the thermometer back in the disinfectant solution.
- 16. Record temperature reading.
- 17. Inform the mother about her child's temperature.
- 18. If temperature is above normal, initiate procedures to lower it.
- 19. Wash hands thoroughly.

#### **Educational Messages**

- Ask what the mother does when her child has a fever and take the opportunity to educate her about appropriate measures for treating a child with a fever.
- Explain to the mother why the elevation of temperature is a defense mechanism on the part of the child's body.
- Ask the mother about her own health and what method of family planning she uses.
   Answer any questions she has and refer her for follow-up, if necessary.

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# Measuring Adult Body Temperature

# Objective

To ensure accurate measurement and monitoring of a patient's body temperature.

#### **Equipment and Supplies**

#### A tray with:

- · Rectal or oral thermometer
- · A container with cotton swab moistened with water
- Dry cotton swabs
- A container with cotton swabs, moistened with alcohol or soap and water
- Kidney shape receiver for used swabs
- · Handwatch with second-hand
- · Lubricant and gauze
- A pen and sheet of paper to record temperature

## Procedures for Measuring Adult Temperature

- 1. Wash your hands.
- 2. Prepare the necessary equipment and supplies.
- 3. Assure the patient and explain what you are going to do.
- 4. Assist the patient to get into a comfortable position.
- 5. Before use, clean the rectal thermometer from mercury bulb towards the end and after use clean it from the end towards the mercury bulb.
- 6. Read the temperature while you hold the thermometer between your fingers horizontally at your sight level. Roll it slowly until you can see the mercury line clearly.
- 7. Hold the thermometer tightly between thumb and index finger and shake it quickly until the mercury goes back into the bulb, showing a reading of less than 35°C.

#### By Mouth

- Make sure that the patient did not have a hot drink or smoked for at least 15 minutes.
- Ask the patient to open his/her mouth and to put the thermometer under their tongue.
- Ask the patient to hold the thermometer with their lips, not teeth.
- Leave the thermometer for 3-4 minutes.



#### Under the Armpit

- Put the bulb of the thermometer under the armpit, lower the patient's arm and have them keep their arm close to their chest.
- Leave the thermometer there for 5-7 minutes.

#### In the Rectum

- Lay the patient on their side, with the upper leg slightly in the flexion position.
- Place some lubricant on a piece of gauze and apply a thin film to the rectal thermometer.
- Ask the patient to breathe deeply to relax, separate their buttocks to expose opening of the anus and insert the thermometer gently to 3.5 cm.
- Let the buttocks return to their position and keep the thermometer in place for three minutes.

#### Reading the Thermometer

- Read the temperature while you hold the thermometer between your fingers horizontally at your sight level. Roll it slowly until you can see the mercury line clearly.
- Wash the thermometer with alcohol and soap and put it back in its place.
- Tell the patient what their temperature was and ask them if they have any questions.
- Provide appropriate health education.
- Record the result, time and site of measurement.
- · Wash your hands.
- Inform the physician if the temperature exceeds 38°C.

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# Measuring Radial Pulse

The pulse is the pressure wave that is produced due to blood flow from the left ventricle to the aorta, and from the aorta to the arterial system. Normal adult pulse rate 60-90 beats per minute.



#### Objective

To correctly evaluate the rate, rhythm, and quality of patient's heart contraction.

#### **Equipment and Supplies**

- · Watch with a second-hand
- Stethoscope (optional)
- · Vital signs recording form

#### Procedures for Measuring Radial Pulse

- Wash your hands.
- Assure the patient and explain what you are going to do.
- Place the patient in a comfortable position.
- Using three fingers (index, middle and ring fingers) gently press over the artery, usually the radial.
- When you feel the pulse, begin to count it for 60 seconds. Be sure not to press too hard.
- Observe the rate and regularity of the pulse.
- If necessary, place the stethoscope at the heart apex and listen for 60 seconds.
- Record the pulse rate, rhythm and type.
- Tell the patient your findings, ask if they have any questions and provide appropriate health education.
- Wash your hands.

# Conditions Requiring Careful Monitoring of the Radial Pulse

- Patients with cardiovascular disease
- Patients receiving IV fluids
- Patients with localized or general inflammation
- Patients who have experienced trauma

# Measuring Respirations

Respiration is the process by which the body is supplied by oxygen and expels carbon dioxide. Normal adult respiration rate is 16-20 breaths per minute.

#### Objective

To ensure the accurate reading and evaluation of the patient's rate, depth and type of respiration.

#### **Equipment and Supplies**

- Watch with second hand
- Stethoscope (optional)
- Pen

# Procedures for Measuring Respirations

- · Wash your hands.
- Measure respirations after measuring the patient's pulse, while fingers are still on the patient's hand.
- Count every complete inspiration and expiration.
- Count the patient's breaths for one complete minute.
- If appropriate, use the stethoscope to listen to and count the patient's respirations.
- If a spirometer is available, teach the patient to breathe in and out through it normally.
- Observe the respiration rate, depth, and regularity.
- Record the rate, depth, and type of respirations on the vital signs form.
- Inform the patient of the findings.
- Ask the patient if he or she has any questions, and provide appropriate health education.
- Wash hands.

#### Conditions Requiring Careful Monitoring of Respirations

- Emergency care patients
- Patients receiving oxygen therapy
- Patients with conditions effecting respiration
- Newborns



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# Preventing Dehydration with Oral Rehydration Solution (ORS)

All nurses should know and be able to teach mothers/parents the signs of dehydration and how to prepare ORS at home to prevent dehydration. Dehydration results when the body loses more liquid than it takes in. This can happen with severe diarrhea and/or vomiting. Dehydration develops more quickly and is more dangerous in small children.

In very severe dehydration the pulse may be rapid and weak, breathing may be labored and fever or even convulsions may be present.

# Objectives

- 1. Recognize the signs of dehydration and rehydrate children using ORS.
- 2. Teach mothers to prepare and use oral rehydration solution to prevent dehydration.

# Signs of Dehydration

- Thirst/dry mouth
- Little or no urine/or urine is dark yellow
- · Sudden weight loss
- Sunken tearless eyes
- Sunken anterior fontanel in infants under 15 months
- Loss of elasticity or stretchiness of skin

#### Home Therapy

Home therapy is appropriate when the child has no signs of dehydration. Explain the three rules of treating diarrhea at home to the mother.

**Rule 1.** Give the child more fluid than usual to prevent dehydration and continue to give these fluids until the diarrhea stops.

- Suitable fluids contain salt, such as ORS, salted rice water, yogurt, and chicken soup.
- Fluids that do not contain salt are unsuitable (*e.g.*, plain water, unsalted rice water, weak tea, sweetened drinks, very sweet tea, soft drinks).
- Fluids with purgative action and stimulants such as coffee are also unsuitable.

**Rule 2.** Continue to feed the child to prevent malnutrition. Continue breastfeeding; if the child is not breast-fed, give the usual milk. If the child is 6 months or older, or already taking solid food:

- Give cereal or another starchy food mixed, if possible, with pulses, vegetables, and meat or fish. Add 1-2 teaspoonfuls of vegetable oil to each serving.
- Give fresh fruit juice or mashed bananas to provide potassium.
- Give freshly prepared food. Cook and mash or grind food well.
- Give the same food after diarrhea stops and give an extra meal each day for 2 weeks.

**Rule 3.** Take the child to a health worker if the child does not get better in 3 days or develops any of the following symptoms.

- Many watery stools
- · Eating or drinking poorly
- · Repeated vomiting
- Fever
- Marked thirst
- · Blood in stool

NOTE:

If the child will be given oral rehydration solution (ORS) at home, show the mother how to prepare and how much ORS to give. Provide her with a two-day supply of packets.

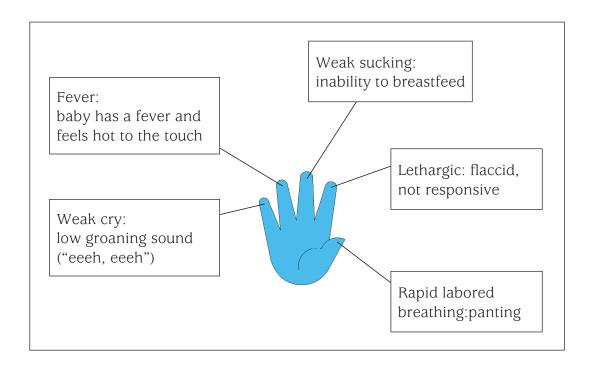
#### Making ORS at Home

ORS can be made at home using the packages provided at the health centers or in the pharmacies (directions on the package should be followed). Usually diarrhea is best treated by ORS/fluids and no medications are needed. Explain to the mother that she should treat diarrhea with liquids, ORS and frequent feedings. If the child does not improve after a few days and/or has symptoms of dehydration, consult the physician.

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# The Handful of Danger Signs

When visiting a home with a newborn or young infant, or when examining a baby in the health center that appears sick, there is an easy way to determine whether or not the situation is critical (whether a physician needs to examine the baby). On "The Handful of Danger Signs," each finger of the hand represents a symptom. You can teach the technique to parents as well.



# Cardiopulmonary Resuscitation (CPR)

CPR is a combination of chest compressions and rescue breathing (breathing for the person). Rescue breathing supplies the oxygen the patient needs into the lungs and the chest compressions circulate the oxygen to the vital organs in the body.

# Objectives

- 1. Ensure that nurses know and use appropriate procedures in administering CPR.
- 2. Understand the management of airway obstruction.
- 3. Know the definition and priorities in CPR.

## Important Background Points

When the heart stops beating or beats too poorly to circulate blood properly, this is called "cardiac arrest." When cardiac arrest occurs, breathing soon stops. A person is considered to be in cardiac arrest when he or she is unconscious, not breathing, AND has no pulse. No pulse means that no blood is going to the brain. That means that the brain is not getting oxygen (carried in the blood) and the brain will soon die.

Even though a person in cardiac arrest is not breathing and has no pulse, the cells of the brain and other important organs continue to live for a short time (until the oxygen in the blood is used up). Without CPR, the brain begins to die in as few as 4 minutes. However, CPR provides only about a third of the normal blood flow needed and advanced medical care must be provided as soon as possible.

### **Main Causes of Cardiac Arrest**

- · Myocardial infarction
- Pulmonary embolism
- Trauma to chest or neck
- Severe allergic reaction (laryngospasm)
- Severe asthma (bronchospasm)
- Drowning
- Foreign body, especially while eating

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#### The absence of a pulse is the MAIN sign of cardiac arrest!

CPR can be administered by one or two people. The technique used is slightly different in each case.

#### One Person Administering CPR

- Confirm that the patient is unconscious: try to rouse by shaking and shouting.
- Call for help if available.
- Position the patient so that he or she is lying flat on his or her back and on a level surface. CPR does not work as well if the patient is sitting up or is on a soft surface like a mattress.
- Assume a kneeling position midway between the patient's head and chest so that you can move easily from giving rescue breaths and chest compressions.
- Clear and open the patient's airway by tilting the head back and lifting the chin forward to move the tongue away from the back of the throat.
- Check to see if the patient is breathing by looking at the chest to see if it is moving up and down (lungs inflating) and listen for sounds of breathing for about 5 seconds.
- Give two breaths by mouth to mouth or mask and bag each lasting about 1½ seconds.

#### Giving Mouth to Mouth

- 1. Pinch the patient's nose shut with the thumb and middle finger and make a tight seal around the patient's mouth with your mouth.
- 2. Breathe slowly and gently into the patient's mouth until you see the chest rise.
- 3. Pause between breaths to let the air flow out and watch the chest rise each time you give a breath to make sure your breaths are going in.
- 4. Check for a pulse (carotid) after giving the first two breaths.
- 5. If you feel a pulse but the patient is still not breathing give one breath about every 5 seconds.
- 6. If there is no pulse, lean over the chest and position your hands and begin chest compressions.

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- 7. To find the correct hand position, find the notch at the lower end of the breastbone where the ribs meet.
- 8. Place the heel of one hand above this notch and place the other hand directly on top of it. Use the heel of your bottom hand to apply pressure to the breastbone.
- 9. Compress the chest by pressing straight down using the weight of your upper body, then release. Use a smooth even rhythm.
- 10. Keep your shoulders directly over your hands and your elbows locked (your arms should be straight).
- 11. Release the pressure on the chest and allow the chest to return to normal after each compression, without letting the hands lose contact with the chest.
- 12. As you do the compressions, count "one and two and three and four and five and six and..." Do 15 compressions in about 10 seconds (a little more than one compression per second).
- 13. After you give 15 compressions, tilt the head back again, lift the chin forward and give two SLOW breaths.
- 14. One cycle of giving 15 chest compressions and 2 breaths should take about 15 seconds.
- 15. Do four cycles of 15 chest compressions and 2 breaths (this should take about 1 minute) then check the pulse.
- 16. If there is still no pulse then continue CPR.
- 17. Re-evaluate the situation every 5 minutes.
- 18. Continue administering CPR until death is confirmed or you are too exhausted to continue.

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### Two People Administering CPR

- When two people administer CPR, one provides rescue breathing and the other administers chest compressions.
- The two people should coordinate breathing and chest compression by calling out the number of chest compressions to each other.
- Confirm that the patient is unconscious: try to rouse by shaking and shouting.
- Call for help if available.
- Position the patient so that he or she is lying flat on his or her back and on a level surface. CPR does not work as well if the patient is sitting up or is on a soft surface like a mattress.
- Each person should assume a kneeling position on opposite sides of the patient, midway between the head and the chest.
- Clear and open the patient's airway by tilting the head back and lifting the chin forward to move the tongue away from the back of the throat.
- Check to see if the patient is breathing by looking at the chest to see if it is moving up and down (lungs inflating) and listen for sounds of breathing for about 5 seconds.
- Give two breaths by mouth to mouth or mask and bag each lasting about 1½ seconds.

#### Giving Mouth to Mouth

- 1. Pinch the patient's nose shut with the thumb and middle finger and make a tight seal around the patient's mouth with your mouth.
- 2. Breathe slowly and gently into the patient's mouth until you see the chest rise.
- 3. Pause between breaths to let the air flow out and watch the chest rise each time you give a breath to make sure your breaths are going in.
- 4. Check for a pulse (carotid) after giving the first two breaths.
- 5. If you feel a pulse but the patient is still not breathing, give one breath about every 5 seconds.
- 6. If no pulse, lean over the chest, position hands, and begin chest compressions.
- 7. To find the correct hand position, find the notch at the lower end of the breastbone where the ribs meet.

### Standards of Care for Health Centers

- 8. Place the heel of one hand above this notch and place the other hand directly on top of it. Use the heel of your bottom hand to apply pressure to the breastbone.
- 9. Compress the chest by pressing straight down using the weight of your upper body, then release. Use a smooth even rhythm.
- 10. Keep your shoulders directly over your hands and your elbows locked (your arms should be straight).
- 11. Release the pressure on the chest and allow the chest to return to normal after each compression, without letting the hands lose contact with the chest.
- 12. Administer 1 breath for every 5 chest compressions. Call the number of chest compressions out.
- 13. Continue administering breaths and chest compressions for 3-5 minutes, then stop and check for spontaneous breathing and a pulse.
- 14. Alternate positions (take turns administering breaths and chest compressions).
- 15. Continue administering CPR until death is confirmed or you are both too exhausted to continue.

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## Administering CPR to an Infant or Child

Infants and children usually only have respiratory arrest (stopped breathing) and may only need mouth-to-face breathing. The infant or child's airway may be blocked by food, a small object such as a coin or toy or fluids such as water (in drowning), saliva, or blood.

- 1. Clear and open the airway.
- 2. If necessary, administer abdominal thrusts by straddling the child's legs, position your hands by placing the heel of one hand on the middle of the abdomen just above the navel with your fingers pointing toward the child's head and the one hand on top of the other.
- 3. Confirm that the infant/child is unconscious: attempt to rouse by shaking and shouting.
- 4. Call for help if available.
- 5. Position the infant/child so that they are lying flat, on his or her back and on a level surface. CPR does not work as well if the infant/child is sitting up or is on a soft surface like a mattress.
- 6. Confirm the absence of spontaneous breathing then, tilt the infant/child's head back (to avoid getting air in the stomach), close the infant/child's mouth and seal your mouth around the infant/child's nose. Breathe SLOWLY into the infant/child just enough to make the chest rise.
- 7. Give 5 initial breaths. Each breath should last about 1½ seconds.
- 8. Check pulse and confirm absence, and begin chest compressions. For an infant, use 2 fingertips; for a child, use the palm of one hand. Place your fingers/palm of the hand on the breastbone in the middle of the infant/child's chest. Give 5 chest compressions.
- 9. The 5 chest compressions should take about 3 seconds to administer.
- 10. Continue this cycle of 5 compressions and 1 breath for about 1 minute, then recheck pulse and breathing. Check every few minutes (at least every 5 minutes).
- 11. If pulse is absent, continue CPR until help arrives or the infant/child is declared dead.

## **CPR for Infants and Children**

- · Clearing airway especially important
- 2 fingertips for infant compressions
- Palm of one hand for child compressions
- Mild neck extension
- 5 initial breaths (instead of 2 in adults)
- Ratio of compressions to breaths 5:1

Remember to be gentle. Take extra care when administering CPR to infants and children. Their lungs and bones are more fragile than adults.

## Care of Burns

### Objective

To appropriately treat patients with burns caused by heat, electricity, or chemicals.

#### **Important Points**

- The severity of a burn depends on the temperature of whatever caused the burn and the length of time the patient is exposed to it, the burns location on the body, the size of the burn, and the patient's age and medical condition.
- Burns are described by their cause (heat, electricity, chemicals and radiation) or by their depth.
- A burn first destroys the top layer of skin. If it continues to burn, it injures or destroys the second layer of skin.
- When burns break the skin, they can cause infection and loss of fluid from the body. The body's ability to control its temperature and the patient's ability to breathe can also be affected by deep burns.
- A critical burn needs immediate medical attention and can be life-threatening.

## **Burns are Considered Critical When They:**

- Involve breathing difficulty
- Cover more than one body part
- Involve the head, neck, hands, feet or genitals
- Involve a child or elderly person (other than minor burns)
- Are caused by chemicals, explosions or electricity

#### Caring for Burns: 3 Basic Steps

- 1. Stop the burning
- 2. Cool the burn
- 3. Cover the burn

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Table 7. Burn Classification

First Degree Burn (superficial)	Second Degree Burn (partial thickness)	Third Degree Burn (full thickness)
Involves only the top layer of skin	Involves the top layers of the skin	Destroys all layers of skin and may destroy fat, muscles, bones, and nerves underneath
Skin is red and dry	Skin is red and has blister that may open and weep clear fluid	Skin appears brown or black (charred) and tissues underneath sometimes appear white
Usually painful	Usually painful	Extremely painful (or painless if nerve endings destroyed)
Burned area may swell	Burned area usually swells	Tissue too damaged to swell.
Healing usually within 5-6 days	Healing usually within 3-4 weeks	Healing process is long and may take many months
No permanent scarring	Scarring may occur	Extreme, permanent scarring that may require multiple plastic surgery to correct.

#### Procedures for Burn Care

- 1. Explain to the patient what you are going to do in a reassuring manner. Patients with burns are usually very scared and in a lot of pain.
- 2. Act quickly, but be gentle and place the patient in a comfortable position, carefully and quickly removing any of the patient's clothing (if necessary) in order to inspect/treat the burned area.
- 3. Stop the burning by flushing the skin with large amounts of cool, clean water. Do not use ice or ice water other than on small superficial burns because ice causes body heat loss.
- 4. If the burned area cannot be immersed in cool water then apply soaked clean towels, sheets or other wet cloths (make sure that anything used is clean).
- 5. Keep the cloth wet and cool by adding more water as necessary.
- 6. After you have stopped the burning/cooled the burned area, follow the Surgical Dressing Procedure and apply a dry sterile dressing(s) to the burn.
- 7. Be sure that the dressing is LOOSE otherwise it can cause further pain and damage to the sensitive tissue.
- 8. Covering the burn helps prevent infection and reduces pain.
- 9. Do NOT break blisters if they are present because that can increase the risk of infection. Blisters protect the raw, delicate skin underneath.
- 10. Do NOT use any kind of ointment on a severe burn. Ointment may seal in the heat.
- 11. Provide health education to the patient and their family such as how to keep the burned area clean and dry and when to return for follow-up care.

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## **General Care and First Aid Performance Checklists**

Performance Checklist 8:

Sterile Dressing

Performance Checklist 9:

Administering IV Fluids and Medications

Performance Checklist 10:

Administering Intramuscular and Subcutaneous Injections

Performance Checklist 11:

Measuring Blood Pressure

Performance Checklist 12:

Measuring Temperature in Infants and Children

Performance Checklist 13:

Measuring Adult Body Temperature

Performance Checklist 14:

Measuring Radial Pulse

Performance Checklist 15:

Measuring Respirations

Performance Checklist 16:

Preventing Dehydration with ORS

## Performance Checklist 8: Sterile Dressing

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

Tools	Achi	eved?	Comments
Task	Yes	No	Comments
Greets the client, explains the procedure and answers questions.			
2. Washes hands.			
3. Places the patient in a comfortable position and exposes the area around the wound.			
Wearing disposable gloves, gently removes and disposes of old dressing.			
5. Notes the condition of the wound (size, smell, secretions, and healing).			
6. Removes gloves, disposes of them in the proper receptacle and washes hands.			
7. Prepares the sterile dressing package, disinfectant and dressing material.			
8. Correctly places on sterile gloves.			
9. Gently cleans the wound with disinfectant from the less contaminated to the more contaminated area.			
10.Dries the wound and covers it with a piece of clean gauze, fixing it with adhesive tape, proportional with the size of the wound.			
11.Removes and disposes of gloves correctly.			
12.Washes hands.			
13. Gives the client instructions for wound care.			
14. Cleans and sterilizes instruments and puts them back in their correct place.			

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## Performance Checklist 9: Administering IV Fluids and Medications

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

Task	Achi	eved?	Comments
	Yes	No	Comments
Greets the client, explains the procedure and answers questions.			
2. Makes the patient comfortable for the procedure.			
3. Checks the IV solution or dose of the medication for defects, expiration date.			
4. Prepares supplies and places them on tray near patient.			
5. Washes hands.			
6. Chooses the appropriate size needle.			
7. Connects the bag and fills the tubing with fluid.			
8. Wraps the rubber tourniquet approximately 10-15 cm above the injection site.			
9. Asks the patient to open and close hand and checks arm for a suitable vein.			
10.Chooses the appropriate site for the IV and cleans the site.			
11.Follows procedure for inserting the needle			
12. Releases the tourniquet, connects the tubing and opens the valve to begin the drip.			
13. Fixes the needle in place by using adhesive tape.			
14.Cover's the needle site with sterile gauze			

## Standards of Care for Health Centers

Task	Achi	eved?	Communicate
Task	Yes	No	Comments
15.Calculates the rate of dripping correctly and adjusts the flow.			
16.Labels the solution, showing drug, dose, starting time, duration, date, and patient's name.			
17. Makes sure that the patient is comfortable, reassures him/her and asks if they have any questions.			
18. Disposes of the used materials and needle correctly.			
19.Enters a detailed note on the procedure in the clients record.			
20. Observes for pain, redness, or swelling.			
21.Checks vital signs.			
22. Monitors the flow rate of IV solution.			

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## Performance Checklist 10: Administering Intramuscular and Subcutaneous Injections

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

Task	Achie	eved?	Comments
TUSK	Yes	No	Comments
Greets the client, explains the procedure, and answers questions.			
2. Checks the label on the medication against the prescription.			
3. Draws up medication using sterile technique.			
4. Places patient in a comfortable and correct position for the injection, and exposes site.			
5. Chooses the correct site for the injection (buttocks, arm).			
6. Cleans the injection site.			
7. Inserts the needle quickly and aspirates the plunger slightly to check for blood.			
8. Presses the plunger steadily until the medicine is injected.			
9. Takes the syringe out quickly, informs the patient the procedure is over.			
10. Answers questions and informs patient about possible drug reactions.			
11. Washes hands.			

## Performance Checklist 11: Measuring Blood Pressure

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

Task	Achie	eved?	Comments
	Yes	No	Comments
Greets the client, explains the procedure and answers questions.			
2. Washes hands.			
3. Assists the patient to get into a comfortable position with his/her arm supported and extended at the level of the heart and the palm of the hand upward.			
4. Rolls up the patient's sleeve.			
5. Wraps the cuff around the arm 2.5 cm above the elbow joint, with the tubes of the cuff at the nearest side to the elbow.			
6. Presses the cuff to empty the air.			
7. Places the index, middle and ring fingers over the brachial artery.			
8. Shuts the valve and pumps the cuff with air until the brachial pulse cannot be palpated.			
9. Pumps the cuff 30 mm Hg higher than the level of the absent pulse.			
10.Holds the stethoscope over the brachial artery.			
11. Lets the air out of the cuff at the rate of 2-3 Hg per second until the first beat (systolic pressure reading) and continues letting the air out until the beats stop (diastolic reading).			
12.Lets the air out completed and removes the cuff.			

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Task	Achieved?		Comments
TUSK	Yes	No	Comments
13.Informs the patient of the BP reading and answers questions			
14.Records the systolic and diastolic pressures and compares current level to prior measurements.			
15. Washes hands.			
16.Informs physician of any abnormal results.			

## Performance Checklist 12: Measuring Temperature in Infants and Children

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

Task	Achieved?		Communicate
TUSK	Yes	No	Comments
1. Greets the client and inquires about the purpose of the visit.			
2. Reviews child's record.			
3. Washes hands.			
4. Gently places the child on a clean exam table.			
5. Cleans and rinses the thermometer.			
6. Shakes mercury down until mercury level is below 35°C.			
7. Applies lubricant on a swab and lubricates bulb end of thermometer 2.5 cm.			
8. Lays infant on his/her back, holds both ankles with one hand and raises legs to expose anus.			
9. Lays child on his/her left side with his/her leg flexed in a rectangle.			
10. Wipes the anus clean with a dry cotton swab.			
11.Gently and slowly inserts the thermometer into the anus and holds in place for 2 minutes.			
12.Removes thermometer gently and wipes thermometer to remove lubricant.			
13. Wipes anus with clean dry cotton swab to remove excess lubricant.			
14.Helps the infant/child assume a comfortable position and asks mother to redress the child.			

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Task	Achi	eved?	Comments
TUSK	Yes	No	Comments
15.Reads and records the temperature on child record.			
16.Informs mother of her child's temperature and asks if she has any questions.			
17. Provides appropriate health education messages on child health, nutrition, hygiene, and vaccinations.			
18.Cleans the thermometer with cotton swab with soap and water, then rinses with water from tip to bulb end.			
19.Shakes the thermometer safely until the mercury goes below 35°C and places it in the disinfectant solution.			
20. Washes hands.			

## Performance Checklist 13: Measuring Adult Body Temperature

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

Tarel	Achieved?		Commenciate
Task	Yes	No	Comments
1. Greets the client, explains the procedure and answers questions.			
2. Washes hands.			
3. Cleans the thermometer.			
4. Shakes the thermometer quickly and firmly to reduce the mercury level below 35°C.			
Taking Temperature			
<ul> <li>1a. Orally</li> <li>Waits 15 minutes if the patient has taken a hot drink or smoked.</li> <li>Places the thermometer under the patient's tongue.</li> <li>Tells the patient not to place their teeth on the thermometer.</li> <li>Removes the thermometer after 3-4 minutes.</li> </ul>			
<ul> <li>1b. Under the Arm</li> <li>Places the bulb of the thermometer under the armpit.</li> <li>Asks the patient to keep their arm close to their chest.</li> <li>Removes the thermometer after 5-7 minutes.</li> </ul>			
<ul> <li>1c. Rectally</li> <li>Asks the patient to lie on their side with the upper leg flexed.</li> <li>Lubricates the thermometer.</li> <li>Gently inserts the thermometer into the anus approx. 3.5 cm.</li> <li>Removes the thermometer after 3 minutes.</li> </ul>			
Reads the temperature while holding the thermometer horizontally at the sight level.			
3. Informs the patient and answers questions.			

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Task	Achieved?		Commence
TUSK	Yes	No	Comments
4. Provides appropriate health messages/education.			
5. Washes the thermometer with soap and cold water and puts it back in its place.			
6. Records the temperature in the patient's chart, along with the time and site of measurement.			
7. Washes hands.			
8. Informs physician if patient's temperature exceeds 38°C.			

## Performance Checklist 14: Measuring Radial Pulse

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

Task	Achie	eved?	Comments
TUSK	Yes	No	Comments
Greets the client, explains the procedure and answers questions.			
2. Washes hands.			
3. Uses the index, middle and ring fingers to gently press over an artery (usually radial).			
4. Counts the pulse for 60 seconds.			
5. Notes the rate and regularity of the pulse.			
6. Informs the patient the finding and asks if he/she has any questions.			
7. Records the pulse rate, rhythm and type in the patient's record.			
8. Provides appropriate health messages/education.			
9. Washes hands.			

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## Performance Checklist 15: Measuring Respirations

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

Task	Achieved?		Commenciate
Task	Yes	No	Comments
1. Greets the client.			
2. Measures respirations after measuring the patient's pulse while the fingers are still on the patient's hand.			
3. Counts every inspiration/ expiration cycle for one complete minute.			
4. Observes the respiration rate, depth and regularity and records the result.			
5. Informs the patient of the findings and answers any questions.			
6. Provides appropriate health teaching/messages.			
7. Washes hands.			

# Performance Checklist 16: Preventing Dehydration with Oral Rehydration Solution (ORS)

**Instructions:** Observe practices followed at the health center. For each of the tasks listed below, place a check in the "Yes" or "No" box, as appropriate, to indicate whether or not the task was achieved. If a particular task is not applicable, enter NA ("not applicable") in the "Comments" column. Use the "Comments" column to note details about why a particular task was not achieved or other information that may be useful in identifying or resolving inappropriate practices.

	Achieved?			
Task	Yes No		Comments	
Greets the client and discusses the purpose of the visit.				
2. Reviews the client record.				
3. Obtains the following historical information on the diarrhea episode: duration, frequency, consistency of stools, child's fluid intake.				
4. Washes hands.				
<ul> <li>5. Gently examines the child for signs of dehydration:</li> <li>Dry mouth</li> <li>Dark yellow urine (if child has a diaper, if not asks mother about color of child's urine)</li> <li>Sunken, dry eyes</li> <li>Sunken anterior fontanel (if infant)</li> <li>Loss of skin elasticity</li> <li>Rapid pulse rate</li> <li>Rapid respiration rate</li> </ul>				
Weighs infant and compares     current to previous weight.				
7. Explains to mother how to make and give ORS.				
8. Educates mother on the signs of dehydration.				
Encourages breastfeeding mother to continue breastfeeding as frequently as possible				
10. Asks mother if she has any questions.				
11.Informs mother about the need for follow up visit				
12. Asks mother about her own health, and refers her for follow-up if necessary.				
13. Washes hands.				

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## Recognizing Signs of Acute Illness

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## **Recognizing Signs of Acute Illness**

#### Heart Attack

## Objective

To recognize the signals of a heart attack so that patients can be referred promptly for medical treatment.

#### **Important Points**

- It is important to immediately recognize the signs of a heart attack and seek medical attention.
- Most patients who die of a heart attack die within two hours after the first signals appear.
- Patients sometimes delay seeking medical care when they are having a heart attack because they think that the pain they are feeling is from indigestion or a muscle spasm.

#### The major sign of a heart attack is pain or discomfort in the chest that does not go away!

- Heart attack pain is usually felt in the center of the chest, behind the breastbone and may spread to the shoulder, arm or jaw.
- The pain is CONSTANT and is usually not relieved by resting, changing position or taking medicine.
- The person may describe the pain as pressure, squeezing, tightness, aching, or heaviness in the chest. The person may also have difficulty breathing and may breathe faster than normal as the body tries to get more oxygen to the heart.
- The patient's skin may be pale and bluish, especially around the face and they may experience sweating.

Table 8. Signals of a Heart Attack

PAIN	BREATHING	PULSE RATE	SKIN
Persistent chest pain or discomfort	Breathing is noisy and difficult	Pulse may be irregular	Skin may be pale or bluish in color
Not relieved by resting, changing position, or oral medication	Patient is short of breath	Pulse may be faster than normal	Patient's face may be moist, pale or bluish
Pain may range from discomfort to unbearable crushing sensation	Breathing is faster than normal	Pulse may be slower than normal	Patient may be sweating profusely

### Standards of Care for Health Centers

#### **Asthma**

### Objective

To recognize the signs of acute respiratory distress associated with asthma, so that patients can be referred promptly for medical treatment.

### **Important Points**

Asthma should be considered in the following situations:

- Patient presents with episodic wheeze, chest tightness, or shortness of breath.
- Symptoms worsen at night, while exercising or in the presence of allergens or irritants.
- Allergic rhinitis or atopic dermatitis are present.
- Wheezing develops with known triggering factors such as infection, house dust mites, exercise, smoking, and other irritants such as animals.
- The patient has a family history of allergies, asthma, sinusitis, or rhinitis.

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Standards of Care for Health Centers

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