Chapter 7
Communicable and Acute Illness: Identification and Management

Identifying sick children:
Every teacher should know how to identify sick children. By learning to recognize the early signs and symptoms of common illnesses, teachers can exclude children from group settings when they are sick.

Common Communicable Illnesses:
Effective control and protection of other children in group-care settings require teachers to have a sound understanding of communicable illnesses. Some examples of common communicable illnesses are:

- Chickenpox
- German Measles
- Mumps
- Common cold
- Streptococcal (strep throat)
- Impetigo
- Haemophilus Influenza Type b
- Tuberculosis
- Ringworm
- Measles
- AIDS
- Lice
- Hand, Foot, and Mouth
- Hepatitis B
- Pinworms
- Mononucleosis
- Conjunctivitis
- Meningitis

Special Concerns:
Acquired Immunodeficiency Syndrome (AIDS) is one of the most controversial illnesses to appear in recent years. The Center for Disease Control and Prevention (CDC) reports that approximately 9300 U.S. Children under the age of 13 are currently infected with the AIDS virus.

Causes:
- HIV positive mothers during pregnancy, delivery, breastfeeding; and blood transfusions. Dramatic decrease in mother-to-infant transmission.

Management:
- Not transmitted through casual contact.
- Spread primarily through sexual contact, blood, blood products contaminated with the HIV virus.
- Teachers must use universal precautions when handling items contaminated with blood, or other body fluids.
- Children with HIV/AIDS are protected under the Americans with Disabilities Act and cannot be denied access to educational programs.
- Parents are not required to inform school personnel about their child’s condition.
- Teachers are also not required to inform school personnel about their condition.
- Children that are HIV positive should only be excluded from group care settings if they have open sores, uncontrollable nose bleeds, bloody diarrhea, or are at high risk for exposing others to blood contaminated body fluids.
- Children who are HIV positive are actually at greater risk of contracting illnesses and infections from other children because of their immune system is compromised.

Sudden infant Death Syndrome (SIDS)
Deaths are more likely to occur during sleep (nighttime/naps) and especially during fall and winter months. 2-3000 infants continue to die each year. SIDS is the leading cause of death among seemingly healthy infants under one year and most deaths occurring between 2-4 months of age. Although no one single cause has yet to be identified, many children suffer from sleep apnea.

Some potential causes that are being investigated include:
- Mothers who smoke or used drugs during/after pregnancy
- Premature or low birth weight babies (less than 3.5 pounds, 1.6 kg)
- Males and minority babies, especially African Americans
● Having a sibling who also died of SIDS
● Family poverty—lack of education experiences the highest rate of death.
● Prenatal exposure to illicit drugs, such as cocaine, heroin, or methadone
● Second-hand smoke and air pollution
● Overheating due to overdressing baby
● Birth to a teenage mother

Management: (Table 7-2 page 165)

Put babies to sleep on their backs!
Immunized babies are less likely to die from SIDS.
Pacifiers help too but we aren’t sure why.

**Common Acute Illnesses:** many children experience forms of acute illness, but not all are contagious. Teacher’s primary responsibilities include identifying sick children, making them comfortable until parents arrive, and advising the family to contact their health care provider.

Colds—It’s typical for children to experience 7-8 colds per year.
- Common among children in child care
- Caused by a viral infection of the nose and throat
- Toddlers and preschool-aged children are often more susceptible to complications such as earaches, bronchitis, croup, and pneumonia.

**Diaper rash** -
- Irritation of the skin in and around the buttocks and genital area.
- Occurs more often in infants who are formula fed versus breastfed.
- Caused by prolonged contact with ammonia in urine and organic acids in diarrheal stools. Prompt changing of wet and soiled diapers followed by a cleansing of the skin is often sufficient to prevent and treat diaper rash.
- Avoid using baby powders and talcs because babies are apt to inhale fine powder also, when combined with urine, powders become good media for bacterial growth.

**Diarrhea**—The term diarrhea refers to frequent watery or very soft bowel movements. Diarrhea can either be infectious or noninfectious.
- Viral or bacterial infections, such as rotavirus, hepatitis A or salmonellosis. *(infectious)*
- Parasite infections, such as giardia *(infectious)*
- Fruit juices containing sorbitol, especially apple or pear.
- Antibiotic therapy
- Recent dietary changes
- Food allergies
- Food poisoning
- Illness, such as earaches, colds, strep throat, or cystic fibrosis

Frequent or prolonged diarrhea can result in dehydration, especially in infants and toddlers and can be fatal.
- Dryness of the mouth
- Listlessness
- Sunken eyes
- Absence of or no tears
- Decreased urinary output
- Rapid, weak, pulse
- Skin loses elasticity; dough-like
Medical advice should be sought immediately if diarrhea is severe or the child becomes lethargic or drowsy. Children who have experienced diarrhea during the past twenty-four hours should be excluded from group-care settings. Diarrhea that lasts longer than a week should be cause for concern especially if there’s bloating, weight loss or changed appetite.

**Dizziness**

Occasionally, young children will complain of momentary dizziness or spinning sensation after vigorous play. However, repeated complaints of dizziness should be noted and reported to the child’s parents. Dizziness can be a symptom of other health conditions, including:

- Ear infections
- Fever
- Headaches
- Head injuries
- Anemia
- Nasal congestion and sinus infections
- Brain tumor (rare)

Management: Have the child lie down quietly or sit with head resting on or between the knees until the sensation has passes.

**Earaches**

Ear infections are a major health problem during the first three years, affecting boys more often than girls (Bradley, 2003) A number of conditions can cause earaches in children including:

- Upper respiratory infections, such as a cold
- Allergies
- Dental cavities and eruption of new teeth
- Excessive ear wax
- Foreign objects, e.g., plastic beads, food, small toy pieces, stones

Earaches caused by an acute bacterial infection of the middle ear are known as *otitis media*.

- Nausea, vomiting, and/or diarrhea
- Tugging or rubbing affected ear
- Refusal to eat or swallow
- Redness of the outer ear
- Fever
- Dizziness
- Irritability
- Discharge from the ear canal
- Difficulty hearing
- Crying when placed in a reclining position
- Difficulty sleeping

**Fainting**

Is a momentary loss of consciousness, occurs when blood supply to the brain is temporarily reduced.

- Anemia
- Breath holding
- Hyperventilation
- Extreme excitement or hysteria
- Drug reactions
- Illness or infection
- Poisoning

Initially, children may complain of feeling dizzy or weak and the skin may appear pale, cool, and moist, and the child may collapse. Elevate the legs eight to ten inches, and observe breathing and pulse frequently.

**Fever**
Activity, age, eating, sleeping, and the time of day cause normal fluctuations in children’s temperatures. A persistent, elevated temperature is usually an indication of illness or infection.

Causes:
Viral and bacterial illnesses
Urinary tract infections
Heat stroke and over heating

Changes in a child’s appearance may include:
- Flushed or red dened face
- Listlessness of desire to sleep
- Skin that is warm to the touch
- “glassy” eyes
- loss of appetite
- complaints of not feeling well
- increased perspiration
- Chills

Only digital and infrared tympanic thermometers are recommended for use in group-care settings because of safety and liability issues. Glass thermometers are considered unsafe to use.

**Headaches** are not a common complaint of young children. When they do occur, it is usually as a symptom of some other condition, such as:
- bacterial or viral infections
- allergies
- head injuries
- emotional tension or stress
- reaction to medication
- lead poisoning
- hunger
- eye strain
- nasal congestion
- brain tumor (rare)
- constipation
- carbon monoxide poisoning
In the absence of any fever, rash, vomiting or disorientation, children who experience headaches can remain in child care, but should continue to be observed. Patterns of repeated or intense headaches should be noted.

**Heat Rash**-is characterized by fine, red, raised bumps. Generally, it is located around the neck, chest, waistline, cheeks, and inner areas of the forearm. Clothing made of synthetic fabrics and overdressing can also encourage the development of heat rash, especially in young children with sensitive skin.

**Lyme disease**-is a bacterial illness caused by the bite of infected deer ticks commonly round in grassy and wooded areas during the summer and fall months. Early symptoms of Lyme disease are often vague and difficult to diagnose. Flu-like symptoms, including fever, chills, fatigue, headache, joint pain may also be experienced during this stage. If the bacterial infection is not diagnosed early and treated with antibiotics, complications could arise.

**Sore Throats**-are a fairly common complaint among young children, especially during the fall and winter seasons. Most sore throats are caused by viral or bacterial infections that are relatively harmless. It is extremely important, however, not to ignore a child’s complaint of sore throat. Strep throat must be identified and treated with antibiotics.

**Stomachaches**-
Most children experience stomachaches at one time or another.
- Food allergies or intolerance
- Appendicitis
- Intestinal infection, e.g., giardiasis, salmonella, E. Coli
- Urinary tract infections
- Gas or constipation
- Side effect to medication, especially antibiotics
- Change in diet/hunger
- Emotional stress or desire for attention
- Diarrhea and/pr vomiting
- Strep throat

There are several ways to determine whether or not a child’s stomach pain is serious. Encourage the child to use the bathroom and see if urination or having a bowel movement relieves the pain. Stomach pain or stomachaches should be considered serious if they:
- disrupt a child’s activity, e.g., running, playing, eating, sleeping
- cause tenderness of the abdomen
- are accompanied by diarrhea, vomiting, or severe cramping
- last longer than three to four hours
- result in stools that are bloody and contain mucus

If any of these conditions occur while the child is attending school or group care, parents should be notified and advised to seek prompt medical attention for the child.
Teething-
While each child responds differently to the teething process, some do not experience significant discomfort or changes in behavior. High fevers, diarrhea, and vomiting are usually not caused by teething, but may be an indication of illness.

Toothache-
Tooth decay is the most common cause of toothache. Toothaches should be checked promptly by the child’s dentist.

Vomiting-is often associated with acute illness or other health problems, such as:
  - emotional upset
  - viral or bacterial infection, e.g., stomach flu, strep throat
  - Ear infections
  - Meningitis
  - Salmonellosis
  - Indigestion
  - Severe coughing
  - Head injury
  - Poisoning
The frequency, amount, and composition of vomited material are very important to record. Children should be observed carefully for:
  - High fever
  - Abdominal pain
  - Signs of dehydration
  - Headache
  - Excessive drowsiness
  - Difficulty breathing
  - Sore throat
  - Exhaustion
Children who continue to vomit and show signs of a sore throat, fever, or stomach pains should be sent home as soon as possible. Extra reassurance and comforting can help make the experience less traumatic.

West Nile Virus: Caused by a bite from an infected mosquito. The incident is highest during summer and fall seasons.
  - 4200 cases in the U.S. in 2006
  - Symptoms include mild flu-like symptoms
  - Serious symptoms include high fever, muscle weakness, rash, stiff neck, tremors, disorientation, coma, and even death.
  - Eliminate standing water found in flower pots, water fountains, bird baths, etc.
  - Apply mosquito repellents containing Deet, where protective clothing, and stay indoors during early morning and evening hours.