COMMUNICABLE DISEASE CURRICULUM FOR CHILD CARE PROVIDERS
INTRODUCTION

The Ohio Department of Job and Family Services (ODJFS), the Ohio Department of Health (ODH) and the Ohio Department of Education (ODE) prepared this booklet to provide information to child care providers about communicable diseases, measures to take to control the spread of diseases and related child health issues. This course will fulfill the staff in-service requirement of prevention, recognition and management of communicable disease. The curriculum is based upon *Caring for Our Children, National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care and Infectious Disease Control Manual.*

For further information or clarification of the child care licensing rules, instructors may call the ODJFS Child Care Help Desk at (877) 302-2347, option 4 or visit [http://www.jfs.ohio.gov/cdc/providers.stm](http://www.jfs.ohio.gov/cdc/providers.stm)

For further information on the content included in this course, instructors may contact ODH at (614) 995-5599.
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UNIT 1 - INFECTIONS

HOW DISEASES ARE SPREAD

A communicable disease is a disease that can be spread from one person to another. Germs cause communicable diseases. Most germs are very small and can be seen only with a microscope. “Germ” is a commonly used word that refers to more specific terms such as bacteria, virus, fungus or parasite.

Infants and toddlers are highly susceptible to communicable diseases because they have not yet been exposed to many of the most common germs. Therefore, they have not yet built up resistance or immunity to them. Also, young children have many behaviors that promote the spread of germs. For example, they often put their fingers and other objects in their mouths; most germs are spread through contaminated hands and objects.

In order for infection to occur, each link of the chain must be connected. If you can break one link in the chain, spread of infection will not occur. The links of the chain are:

1. Disease-causing germs – There must be enough of the germ present for it to cause illness.

2. Reservoir – The reservoir is where the germ lives, grows and multiplies. The reservoir can be a human, an animal, or something in the environment (for example, plants, soil or water).

3. Portal of exit – The portal of exit is the way the germ leaves the reservoir. Examples of portals of exit include the mouth or nose of a person sneezing or coughing; skin lesions filled with fluid or pus; feces (stool); vomitus; urine; or blood.

4. Route of transmission – The route of transmission is the way germs travel from their reservoir to a susceptible host (see table on page 6).

5. Portal of entry – The portal of entry is the way the germs enters a susceptible host. Often, germs use the same portal to enter a new host that they used to exit the reservoir. Examples of portals of entry include the skin, mouth, nose and blood.

6. Susceptible host – The susceptible host is the person who receives the germ and can get sick from it. Some people have the ability to fight off some infections and may not always get sick when a germ enters their body.
ROUTES OF TRANSMISSION

Direct Transmission – A disease-causing germ is transferred from its reservoir to the susceptible host by direct, physical contact or droplet spread.

- Direct contact happens when a disease-causing germ is spread from physical contact with a person who has the germ. Examples of physical contact include kissing, sexual contact, contact with oral secretions, skin-to-skin contact or contact with sores.

- Droplet spread happens when large particles that are produced by sneezing, coughing or even talking are sprayed into the air. The direct spray is about three feet. The droplets enter the susceptible host directly before they fall to the ground.

Indirect Transmission – A disease-causing germ moves from its reservoir to a susceptible host through the air or by a contaminated object.

- Airborne transmission happens when the disease-causing germ exits the reservoir through the respiratory system through coughing, sneezing, etc. The germ can stay suspended in the air for a long time and can sometimes be blown over great distances. These types of disease-causing germs can also be carried by dust through the air.

- Inanimate objects that can transmit disease-causing germs include food, water, toys, bedding, tissues, doorknobs, etc.

Fecal-Oral Transmission – The disease-causing germ leaves the infected person’s body in the feces (stool) and enters the body of another person through the mouth. This often happens when objects such as toys or fingers which have been soiled with invisible amounts of feces are placed in the mouth. Fecal-oral transmission can also occur if a person eats or drinks food or water that is contaminated with invisible amounts of infected human or animal feces.

Blood Transmission – The disease-causing germ is carried by the blood of an infected person and enters the body of the susceptible host through:

- Cuts or openings in the skin
- Mucous membranes that line body cavities such as the nose, mouth and eye
- The bloodstream through a needle
## TRANSMISSION OF DISEASE
### HOW SOME INFECTIOUS DISEASES ARE SPREAD

<table>
<thead>
<tr>
<th>Direct Transmission:</th>
<th>Indirect Transmission:</th>
<th>Fecal-oral transmission:</th>
<th>Blood transmission:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct contact with an infected person’s skin or bodily fluids</td>
<td>Through the air or by contact with objects contaminated by an infected person’s skin or bodily fluids</td>
<td>Touching feces (poop/stool) or objects contaminated with feces and then touching the mouth</td>
<td>Cytomegalovirus Fifth Disease (very rare) Hepatitis B* Hepatitis C HIV</td>
</tr>
</tbody>
</table>

- Chickenpox*
- Cold sores
- Common cold
- Conjunctivitis
- Cytomegalovirus
- Diphtheria*
- Fifth Disease
- Hand-Foot-and- Mouth Disease
- Hepatitis B* (uncommon)
- Impetigo
- Influenza*
- Lice
- Measles*
- Methicillin-resistance *Staphylococcus aureas* (MRSA)
- Mumps*
- Pertussis*
- Polio* (less common route)
- Ringworm
- Rubella*
- Scabies

- Chicken pox*
- Cold sores
- Common cold
- Conjunctivitis
- Diphtheria*
- Hand-Foot-and- Mouth Disease
- Impetigo
- Influenza*
- Measles*
- MRSA
- Mumps*
- Pertussis* (rarely)
- Pinworms
- Ringworm
- Rubella*

- *Vaccines are available for preventing these diseases.
- **Often transmitted from infected animals through foods or direct contact.
“Standard precautions” is the term used to describe steps child care providers should take to protect themselves from potentially infectious diseases. The concept of “standard precautions” recognizes that any bodily fluid may hold contagious germs. Child care programs must follow standard precautions.

**WHY ARE STANDARD PRECAUTIONS NEEDED?**
Standard precautions are designed to reduce the risk of getting an infectious disease from both recognized and unrecognized sources. Any person may have germs that can be spread through blood or bodily fluids, even if they have no signs or symptoms of the illness themselves. You may not know if someone is infected with a virus such as hepatitis B or HIV, and the infected person may not even know. This is why you must protect yourself in all situations that place you in contact with blood or bodily fluids.

**WHAT ARE STANDARD PRECAUTIONS?**
Standard precautions include the following:

**HAND WASHING PROCEDURES**
Child care staff members and employees shall wash hands with liquid soap and running water or using hand sanitizer at the following times:

- Upon arrival for the day, after breaks, and upon returning from outside.
- After toileting or assisting a child with toileting.
- After each diaper change or pull-up change.
- After contact with bodily fluids or cleaning up spills or objects contaminated with bodily fluids.
- After cleaning or sanitizing or using any chemical.
- After handling pets, pet cages or other pet objects that have come in contact with the pet.
- Before eating, serving or preparing food or bottles or feeding a child.
- Before and after completing a medical procedure or administering medication.
- When visibly soiled (must use soap and water)
At the following times, each child shall wash hands with liquid soap and running water or use hand sanitizer (if older than 24 months) and be assisted as needed:

- Upon arrival for the day.
- After toileting/diaper change.
- After contact with bodily fluids.
- After returning inside after outdoor play.
- After handling pets, pet cages or other pet objects that have come in contact with the pet before moving on to another activity.
- Before eating or assisting with food preparation.
- After water activities.
- When visibly soiled (must use soap and water).

Children who are unable to stand by themselves may be given wet paper towels and soap to wash and rinse their hands.

Rubbing hands together under warm, running water and using soap are the most important parts of washing away infectious germs. Disposable wipes should not be used as a substitute for washing hands with soap and running water. Disposable wipes should be used only to remove residue such as food off a baby’s face or feces from a baby’s bottom during diaper changing.
WEARING GLOVES

- During contact with blood or bodily fluids (such as vomit or feces)

Environmental sanitizing should be performed regularly and as needed. These requirements are described in the “Environmental Control Measures” section.

Materials, such as clothing, that contain blood should be placed in sealable, leakproof plastic bags (or double bagged) that are securely tied. These items are sent home with the child.

Disposal of materials, such as tissues/paper towels that have been used to clean up blood or other bodily fluids, requires a sealable, leakproof plastic bag (or double bagged) that are securely tied.
Child care programs follow the same standard precautions as hospital and clinic settings, with the following exceptions:

- Use of gloves is optional except when blood or blood-containing bodily fluids may be involved
- Gowns and masks are not required
- Appropriate barriers include materials such as disposable diaper table paper, disposable towels and surfaces that can be sanitized

**DIAPERING**

Two diaper-changing methods may be used to minimize the risk of transmitting infection from one child to another or to staff. One method involves the use of gloves and the other does not. The method selected should be used consistently by the staff. Whichever method is chosen, never wash or rinse diapers or clothes soiled with fecal material in the child care setting. Because of the risk of splashing and cross contamination of hands, sinks and bathroom surfaces, rinsing increases the risk that staff and children would be exposed to germs that cause infection. All soiled clothing should be bagged and sent home with the child without rinsing. (Solid feces may be dumped into a toilet.)

Bagged, soiled clothing needs to be stored away from the rest of the child's belongings and out of reach of children. Be sure to tell parents about this procedure and why it is so important.

**PROCEDURE FOR DIAPERING A CHILD**

The following chart explains the procedure for diapering. The chart mentions disposable gloves, though it is important to note that gloves are not required to be worn during diaper changing. If gloves are worn, they must be non-latex due to the risk of allergies.
Safe and Healthy Diapering to reduce the spread of germs

Keep a hand on the child for safety at all times!

1. PREPARE
   • Cover the diaper changing surface with disposable liner.
   • If you will use diaper cream, dispense it onto a tissue now.
   • Bring your supplies (e.g., clean diaper, wipes, diaper cream, gloves, plastic or waterproof bag for soiled clothing, extra clothes) to the diapering area.

2. CLEAN CHILD
   • Place the child on diapering surface and unfasten diaper.
   • Clean the child’s diaper area with disposable wipes. Always wipe front to back!
   • Keep soiled diaper/clothing away from any surfaces that cannot be easily cleaned. Securely bag soiled clothing.

3. REMOVE TRASH
   • Place used wipes in the soiled diaper.
   • Discard the soiled diaper and wipes in the trash can.
   • Remove and discard gloves, if used.

4. REPLACE DIAPER
   • Slide a fresh diaper under the child.
   • Apply diaper cream, if needed, with a tissue or a freshly gloved finger.
   • Fasten the diaper and dress the child.

5. WASH CHILD’S HANDS
   • Use soap and water to wash the child’s hands thoroughly.
   • Return the child to a supervised area.

6. CLEAN UP
   • Remove liner from the changing surface and discard in the trash can.
   • Wipe up any visible soil with damp paper towels or a baby wipe.
   • Wet the entire surface with disinfectant; make sure you read and follow the directions on the disinfecting spray, fluid or wipe. Choose disinfectant appropriate for the surface material.

7. WASH YOUR HANDS
   • Wash your hands thoroughly with soap and water.

Centers for Disease Control and Prevention
National Center for Emerging and Zoonotic Infectious Diseases
USING TOILET – TRAINING EQUIPMENT

Potty chairs are difficult to keep clean and out of the reach of children. Small-size, flushable toilets or modified toilet seats and step aids are preferable. If potty chairs are used for toilet training, you should use potty chairs only in a bathroom area and out of reach of toilets or other potty chairs. After each use of a potty chair, you should:

- Immediately empty the contents into a toilet, being careful not to splash or touch the water in the toilet.
- Rinse the potty with water from a sink used only for custodial cleaning.
- DO NOT rinse the potty in a sink used for washing hands or food preparation.
- Dump the rinse water into a toilet.
- Wash and sanitize the potty chair. (See “Cleaning and Sanitation Materials” section.)
- Wash and sanitize the sink and all exposed surfaces.
- Wash the child’s hands and your hands thoroughly.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

The Occupational Safety and Health Administration (OSHA) requires all child care programs with more than 10 child care staff members (including family child care homes) to have an Exposure Control Plan for Blood-borne Pathogens. This plan must be in writing and include:

- Exposure determination - This is a list of the job title(s) or duties that might put individuals in contact with blood or blood-containing fluids (such as first aid, nose blowing, diapering, etc.).
- Methods of compliance - These are the ways to ensure the plan will work. They should include written standard precautions and cleaning plans, the availability of gloves, and staff training.
- Exposure-reporting procedures - These are required. Procedures tell staff what to do if a child care staff member comes into contact with blood on his/her broken skin (cuts, scratches, open rashes or chapped skin) or mucous membranes (in the eye, mouth or nose). There are also record-keeping requirements to document:
  - The exposure situation
  - Whether the child care staff member received a free medical exam and follow-up
  - Whether the child care staff member was offered the hepatitis B vaccination if he/she did not already have the series
- OSHA-required training should be provided to all staff at the time of hire. Training should include:
  - An explanation of how HIV and hepatitis B are transmitted
  - An explanation of standard precautions and the exposure control plan for the child care program
Prevention and Control of communicable diseases are important because communicable diseases:

- Can lead to serious health problems, such as pneumonia, meningitis or kidney disease
- Are easily spread to other people
- Cause absenteeism

Immunization/handwashing are the most effective means to prevent the spread of disease.

All children admitted to a child care program (including school-age child care programs) should be up-to-date on immunizations. Ohio child care licensing rules require each child not yet attending kindergarten and above in an elementary school to have an annual physical exam and written proof of immunizations. Each child in the child care program should have a record of up-to-date immunizations on file. If the child is exempt from immunizations because of a medical condition or religious objection, this should be noted on the child medical statement. These records must be maintained in the child’s file.

Many diseases that cause serious problems for children and adults can be prevented by immunizations. These diseases include chickenpox (varicella), diphtheria, Haemophilus influenzae type B, meningitis, hepatitis A, hepatitis B, influenza, pneumococcal disease, measles, mumps, polio, rubella (German measles or three-day measles), tetanus and whooping cough (pertussis). These diseases are less common in the United States because most people have been immunized. Staff and children in a child care setting are at increased risk for infectious diseases because of the many hours spent in close contact with children.

The Ohio Department of Health (ODH) recommends children who are not up-to-date on their immunizations be excluded from child care until they have begun the series of shots needed. Because this schedule changes frequently, you should contact your child’s pediatrician, or local or state health department at least annually for updates. Recommendations can be found by following this link [cdc.gov/vaccines/schedules/index.html](http://cdc.gov/vaccines/schedules/index.html).
IMMUNIZATIONS FOR CHILDREN

Each year, the Advisory Committee on Immunization Practices publishes immunization schedules for infants and children. These schedules summarize recommendations for routine vaccines. The CDC updates these schedules each year.

To view the most current CDC immunization schedules, go to cdc.gov/vaccines/schedules/index.html. For easy reference, you can download and print the schedules that apply to the ages of the children you serve. The CDC schedules contain detailed information about the vaccines, along with recommendations for when they should be administered. The following vaccines are required for children in child care settings, pursuant to ORC 5104.014:

- Varicella (Chickenpox)
- Tetanus-Diphtheria-Pertussis (Tdap)
- Haemophilus influenza type B
- Hepatitis A and B
- Influenza
- Rotavirus
- Pneumococcal disease
- Measles-Mumps-Rubella (MMR)
- Poliomyelitis

IMMUNIZATION AND HEALTH HISTORY FOR CHILD CARE STAFF

Children, especially those in groups, are more likely to get certain communicable diseases than are adults. Child care staff are exposed to infectious diseases more frequently than adults who have limited contact with children. To protect yourself and the children in your care, you need to know what immunizations you received as a child and if you had certain childhood diseases. If you are not sure, your health care provider can test to see if you are immune to some of these diseases. If you are not immune, your health care provider can vaccinate you.

According to OAC rules 5101:2-12-08 (centers) and 5101: 2-13-08 (family child care), all child care staff members must have medical statements signed by their health care providers verifying they are immunized against measles, mumps, and rubella, tetanus and diphtheria, and by 1/1/2018 they are also required to have the pertussis vaccination. The medical statements must also document they are physically fit for employment in a program caring for children.

Other recommended vaccinations include varicella (chickenpox), Hepatitis A and B, Polio, and an annual flu vaccination.
HEPATITIS B VACCINATION

Pursuant to OSHA regulations, if child care programs have more than ten employees, the hepatitis B Vaccine must be offered by the employer at no cost to staff. The hepatitis B vaccine series can begin either:

- Within 10 days of employment
- Within 24 hours after a potential blood exposure (accidental contact with blood while administering first aid, diapering an infant with a bloody stool, etc.)

Child care staff members who decline vaccination must sign a declination form. An example of this can be found at osha.gov. If the child care staff member changes his/her mind later, the employer is required to make the vaccine available at no cost to the child care staff member (if the child care staff member is still at risk of exposure in his/her job).

For additional information about hepatitis B and the vaccine, please refer to cdc.gov/vaccines/hcp/vis/vis-statements/hep-b.html. For OSHA requirements, including hepatitis B vaccine, go to www.osha.gov, refer to 29 CFR 1910.1030 and scroll down to 1910.1030(f)

NOTE: The hepatitis B vaccine is a series of three shots that must be given on a specific schedule. Because all children are required to have the series before entering care, child care providers should be at a reduced risk of getting hepatitis B in a child care setting.

ODH Contact Information:
Ohio Department of Health
(614) 466-3543

RECOMMENDED IMMUNIZATIONS FOR CHILD CARE STAFF

ODH recommends that adults / child care workers should have all age appropriate vaccinations recommended by the Advisory Committee on Immunization Practices (ACIP). Please find the below at Centers for Disease Control and Prevention (CDC) Adult Immunization Schedule. (cdc.gov/vaccines/schedules/easy-to-read/adult.html)
<table>
<thead>
<tr>
<th>IMMUNIZATION</th>
<th>HOW OFTEN</th>
<th>WHY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza (Flu)</td>
<td>All child care staff, especially those who have chronic health conditions or are over 50 years of age should be immunized against the flu. Immunizations are given yearly, starting in October, because a new flu vaccine is developed each year to protect against the strains of flu viruses expected that year.</td>
<td>Flu is a respiratory disease and causes fever, chills, headache, muscle ache, sore throat, cough and cold symptoms. Vomiting and diarrhea are usually not seen with the flu. The flu may lead to pneumonia and other severe illness among the young (0-23 months), elderly and those with chronic illnesses or weak immune system.</td>
</tr>
<tr>
<td>Polio</td>
<td>Child care staff, especially those working with children who are not toilet-trained, should have a record of a primary series of three doses (usually given in childhood) and a supplementary dose given at least six months after the third dose in the primary series.</td>
<td>Polio attacks the nervous system and can cause paralysis in legs or other areas.</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>Hepatitis A vaccine is not routinely recommended for child care staff but may be indicated if the local health department determines the risk of hepatitis A in the community is high. Any person who travels out of the country frequently should consider getting hepatitis A vaccine.</td>
<td>Hepatitis A is a liver infection that causes fever, a loss of appetite, nausea, diarrhea, jaundice and a generally ill feeling that may persist for weeks. During an outbreak in a child care setting, hepatitis A spreads easily and quickly. However, in the absence of an outbreak, the risk to child care staff in general does not seem to be</td>
</tr>
<tr>
<td>Chickenpox</td>
<td>Child care staff who know they have had chickenpox (varicella) can assume they are immune. All other staff should consider getting immunized against chickenpox. Persons who believe they have never had chickenpox or are unsure can be immunized. In some areas, blood tests may be available to determine if a person is susceptible and in need of immunization.</td>
<td>Chickenpox can be a severe disease in adults. Child care staff are at high risk of being exposed to chickenpox in the child care setting.</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>Child care staff who may have contact with blood or blood-contaminated bodily fluids or who work with developmentally disabled or aggressive children should be immunized against</td>
<td>Hepatitis B causes serious illness, and one in 20 persons will develop chronic hepatitis, which can destroy the liver and raise the risk of getting liver cancer. Persons who develop chronic</td>
</tr>
</tbody>
</table>
HEALTH RISKS FOR PREGNANT CHILD CARE STAFF

Several common childhood diseases may be harmful to unborn children and to pregnant women if they contract the disease after a first-time exposure.

**CYTOMEGALOVIRUS (CMV)**

- **Prevalence:** In the United States, approximately 50-80% of women have been infected with CMV by the age of 40 years. About half of pregnant women have never been infected with CMV, and approximately 1-4 of every 100 women (1-4%) have a first CMV infection during their pregnancy. Once CMV is in a person’s body, it stays there for life.
- **Maternal effects:** Most women will have no symptoms, but if they do, they may have a combination of the following: fever, fatigue, muscle aches, chills and enlarged lymph nodes in the neck (symptoms similar to mononucleosis).
- **Fetal effects:** About one third of women (33 of every 100) who become infected with CMV for the first time during a pregnancy will pass the infection to their infant. If a woman is infected with CMV before becoming pregnant, the chance of passing the virus to her fetus is about 1 in 100. Exposure of the fetus to CMV during pregnancy is the leading cause of hearing loss in children; other possible effects include blindness, developmental disabilities and long-term neurologic problems.
- **Prevention:** There is not an available CMV vaccine. Use of hyperimmune globulin can provide temporary protection against CMV (passive prophylaxis) and may be appropriate in specific instances; exposed women should consult their physicians. Prevention of congenital infection depends on good hygiene and hand washing technique to prevent maternal infection.
- **Treatment:** None.

**INFLUENZA (FLU)**

- **Prevalence:** In the United States, 5-20% of the population gets the flu each year. On average, there are 200,000 hospitalizations and 3,000-49,000 deaths each year in the United States from flu-related causes.
- **Maternal effects:** Changes in the immune system, heart and lungs during pregnancy make pregnant women (and women up to two weeks post-partum) more prone to severe illness, hospitalization and death from the flu.
- **Fetal effects:** The fetus has a greater chance for premature labor and delivery.
- **Prevention:** The American College of Obstetricians and Gynecologists and the CDC recommend all pregnant women be vaccinated during influenza season (optimally October- November). The nasal spray form of the vaccine should NOT be given to pregnant women.
- **Treatment:** Supportive care and antiviral medication for acute and/or severe infection.
MUMPS

- Prevalence: Because of childhood immunization, 80-90% of adults are immune. The number of mumps cases in the United States can range from roughly 200 to 2,000.
- Maternal effects: As many as 20% of people who get mumps do not have symptoms. An additional 40-50% may have only general respiratory symptoms. Mumps typically start with a few days of fever, headache, muscle aches, tiredness and loss of appetite and is followed by swelling of salivary glands; only 31-65% of those with mumps will have swollen salivary glands.
- Fetal effects: Miscarriage risk may be increased, but there is no increased risk for birth defects. Prevention: A vaccine is available; because it contains attenuated live virus, it should not be given to pregnant women, and pregnancy should be avoided for one month after receiving the vaccine.
- Treatment: Treat symptoms.

PARVOVIRUS (FIFTH DISEASE OR ERYTHEMA INFECTIOSUM)

- Prevalence: About 50% of pregnant women have evidence of prior infection and are immune. The maternal infection rate is highest in child care workers and women with school-aged children. Risk of infection is 5% for casual contact; 20% for intense, prolonged work exposure; and 50% for close, frequent interaction such as household contacts.
- Maternal effects: Fever, headache, runny nose followed by a bright red rash affecting the face (“slapped cheek”). Adults often have milder rashes and symmetrical pain in multiple joints. About 20-30% of adults have no symptoms.
- Fetal effects: Infants usually do not have any problems. However, sometimes an infant will develop severe anemia and the woman may have a miscarriage. This is not common and happens in less than 5% of all pregnant women with parvovirus B19 infection, more commonly during the first half of pregnancy.
- Prevention: Pregnant women may choose to continue going to their workplace if there is an outbreak of fifth disease there. However, if she is not immune to parvovirus B19 and is not currently infected, she may want to stay away from people with fifth disease while pregnant. She should talk with her family, healthcare provider, and employer to decide what is best for her.
- Treatment: Treat symptoms.
RUBELLA (GERMAN OR THREE-DAY MEASLES)

- Prevalence: Up to 25% of women in the United States are not immune to infection from this virus and may become infected after exposure.

- Maternal effects: Mild illness involving fever and a rash. May also have joint pain and enlarged lymph nodes. Approximately 50% of people do not have symptoms.

- Fetal effects: The virus may affect all organs and cause a variety of congenital defects like deafness, blindness, intellectual disability, heart defects and liver and spleen damage and can also lead to fetal death, spontaneous abortion or premature delivery. The severity of the effects of rubella on the fetus depends largely on when during pregnancy the infection occurs. Infection with rubella is most risky in early pregnancy. As many as 85 out of 100 babies born to mothers who become infected with rubella in the first 3 months of pregnancy will have a birth defect. Defects are rare when infection occurs after the 20th week of pregnancy, and the overall chance of defects during the third trimester is probably no greater than for uncomplicated pregnancies.

- Prevention: A vaccine is available; because it contains attenuated live virus, it should not be given to pregnant women, and pregnancy should be avoided for one month after receiving the vaccine.

- Treatment: Treat symptoms.

RUBELLA (MEASLES)

- Prevalence: Most adults are immune due to childhood vaccinations.

- Maternal effects: Fever and malaise, cough, runny nose, red, watery eyes and rash. Rare complications include pneumonia, hepatitis and encephalitis (inflammation of the brain).

- Fetal effects: Miscarriage, premature delivery or low-birthweight baby.

- Prevention: A vaccine has been available since the 1960s. Because it contains attenuated live virus, it should not be given to pregnant women, and pregnancy should be avoided for one month after receiving the vaccine. If a non-immune woman is exposed to measles, she should receive intravenous immune globulin within six days of exposure.

- Treatment: Treat symptoms.
VARICELLA (CHICKENPOX OR SHINGLES)

- **Prevalence:** Most adults (> 90%) are immune, even if there is no clinical history of having chickenpox before.

- **Maternal effects:** Pregnant women who get varicella are at risk for serious complications; 10-20% of pregnant women who get chickenpox develop pneumonia, with the chance of death as high as 40%.

- **Fetal effects:** If a pregnant woman gets varicella in her first or early second trimester, her baby has a small chance (less than 2%) of being born with congenital varicella syndrome. The baby may have scarring on the skin; problems with arms, legs, brain and eyes; and low birth weight. If a woman develops varicella rash from 5 days before to 2 days after delivery, the newborn will be at risk for chickenpox shortly after birth with the chance of death as high as 30%.

- **Prevention:** Women should not receive the chickenpox vaccine within 30 days of pregnancy or during pregnancy. If a pregnant woman is not protected against chickenpox, the people who live with her should be protected. If close contacts have not already had chickenpox, vaccination of these contacts is the most effective way to protect a pregnant woman. Pregnant women should stay away from anyone who has chickenpox; this includes people who have been vaccinated and then get a very mild form of chickenpox, sometimes called “breakthrough” chickenpox (usually little or no fever and fewer than 50 skin lesions) which is still contagious. If a pregnant woman is not protected against chickenpox and finds out that she has been in contact with someone who has chickenpox, she should call her doctor immediately.

- **Treatment:** Supportive care, including calamine lotion and medications to reduce fever and itching. Oral acyclovir (prescription medication) is safe in pregnancy and may decrease the duration of illness if given within 24 hours of rash development.

ENVIRONMENTAL CONTROL MEASURES

In addition to the prevention of disease through immunizations, routine child monitoring and environmental practices will reduce the spread of illness in the child care program.

In this edition of Communicable Disease Curriculum for Child Care Providers, the term “sanitize” is used to describe the process of removing most germs from an object or a surface. The terms “disinfect” and “sanitize” are used interchangeably in the child care field. OAC child care rules require cleaning and sanitizing.

Hand washing: The single most effective practice that prevents the spread of germs in a child care setting is good hand washing. Some activities in particular expose children and staff to germs or increases the risk of transmission to others. The spread of germs can be stopped by washing your hands and teaching the children good hand washing practices.

Use of gloves alone will not prevent contamination of hands or spread of germs and should not be considered a substitute for hand washing. When removing gloves, be careful to avoid contaminating exposed skin with the dirty glove.
NOTE: Alcohol rubs must not be used on children because they contain an alcohol. Alcohol rubs must be kept out of the reach of children because they are poisonous if ingested. Remember, child care providers are role models for good health practices. Children learn by observation. If staff use proper hand washing techniques, the children will follow their example.

*Disposable wipes – Pre-moistened towelettes or disposable towels that may be used to clean solid residue on children or surfaces (for example, baby wipes, non-alcohol-based hand wipes).

**Alcohol-based hand rubs – Alcohol-based hand rubs are considered hand sanitizers but must be used according to OAC rules. These should not be used on children.

CLEANING AND SANITATION MATERIALS

NOTE: See “Definitions” section.

Keeping the child care environment clean and orderly is very important for the health, safety and emotional well-being of both children and staff. Ohio child care licensing rules require child care programs to provide safe and sanitary furniture, materials and equipment. One of the most important steps in reducing the number of germs and, therefore, the spread of disease is the thorough cleaning of surfaces. Surfaces considered most likely to be contaminated are those with which children have close contact. These include toys that children put in their mouths, food preparation areas, and surfaces likely to become very contaminated with germs, such as diaper changing areas.

Cleaning is the reduction of soil on surfaces, furniture, equipment, toys and utensils. Routine cleaning with detergent and water is the most useful method for removing germs from surfaces in the child care setting. Good mechanical cleaning (scrubbing with soap and water) physically reduces the number of germs on the surface, just as hand washing reduces the number of germs on the hands. Removing germs in the child care setting is especially important for soiled surfaces that cannot be treated with chemical sanitizers, such as some upholstery fabrics.

Some items and surfaces should receive an additional step, sanitation, to kill germs after cleaning with detergent and rinsing with clear water. Items that can be washed in a dishwasher or hot cycle of a washing machine do not have to be sanitized because these machines use water that is hot enough for a long enough period of time to kill most germs. Sanitation is the reduction of germs by a chemical process. Sanitation usually requires soaking the item for several minutes to give the chemical time to kill the remaining germs. Commercial products that meet the Environmental Protection Agency (EPA) standards for “sanitary disinfection” (solutions that kill germs) may be used for this purpose. See the Industrial Products section on the next page for instructions.

One of the most effective chemicals for sanitation in child care settings is a homemade solution of household bleach and water. Bleach is registered by the EPA as a sanitizer, and it is inexpensive and easy to get. The solution of bleach and water is easy to mix, is safe if handled properly, and kills most infectious agents (except parasites). Follow the instructions on the bleach product to create the solution.
Discard bleach solution at the end of the day. A solution of bleach and water loses its strength very quickly and easily. It is weakened by organic material, evaporation, heat and sunlight. Therefore, bleach solution must be mixed fresh each day to make sure it is effective. Any leftover solution should be discarded at the end of the day. NEVER mix bleach with anything but fresh tap water! Other chemicals may react with bleach and release a toxic chlorine gas. Keep the labeled bleach solution you mix each day in a cool place out of direct sunlight and out of the reach of children.

INDUSTRIAL PRODUCTS

Many industrial products are readily available and meet the EPA standards for disinfectants or sanitizers that may be used for sanitizing. The EPA-approved product must be appropriate for the surface or item you are sanitizing.

Be cautious about industrial products that advertise themselves as “disinfectants” having “germicidal action” or that “kill germs.” While they may have some effect on germs, they may not have the same effectiveness as bleach and water or EPA-approved disinfectants or sanitizers. Questions about commercial products must be directed to the manufacturer of the product or the EPA.

If you use an EPA-approved industrial product as a sanitizer, read the label and always follow the manufacturer’s instructions exactly. The contact time must be followed as instructed on the label. If the contact time is not allowed, then the item or surface will not be sanitized.

CLEANING BLOOD OR BODILY FLUIDS CONTAINING BLOOD

Note: OAC rules 5101:2-12-13 and 5101:2-13-13 require that surfaces contaminated with blood or bodily fluids containing blood must be cleaned with hot, soapy water and then sanitized with an appropriate commercial product registered by the EPA as a sanitizer. The product must be labeled, used according to the manufacturer’s instruction and be appropriate for the item being sanitized.

CLEANING TIPS WHEN USING BLEACH

Bathrooms: Use the bleach in accordance with the manufacturer’s recommendation to wipe down all hard, non-aluminum surfaces, including sinks, floors, tiles, handles on toilets; leave wet for two minutes and wipe dry. For the toilet, first flush, then pour three-quarters cup liquid bleach solution into the bowl and brush the surface. Let the solution sit for 10 minutes, then flush again. Bleach is not recommended for use on aluminum surfaces because the solution is corrosive.

Infant/diapering area: Wipe down painted cribs, changing tables, diaper pails, plastic mattress covers, crib bumpers and high chairs with the bleach solution made following the manufacturer’s guidelines. Let stand for two minutes and wipe dry.

Refer to “Food Sanitation” section for instructions on cleaning food surface areas.
WASHING AND SANITIZING TOYS

Toys that children (particularly infants and toddlers) put in their mouths need to be washed, sanitized and rinsed with water between uses by individual children. Toys for infants and toddlers should be chosen with this in mind. If a toy can’t be washed, it probably is not appropriate for an infant or toddler.

When an infant or toddler finishes playing with a toy, you should retrieve it from the play area and put it in a bin reserved for dirty toys. This bin should be out of reach of the children. Toys can be washed at a later, more convenient time and then transferred to a bin for clean toys and safely reused by other children.

To wash and sanitize a hard-plastic toy:

- Scrub the toy in warm, soapy water.
- Use a brush to reach into the crevices.
- Rinse the toy in clean water.
- Follow the manufacturer’s guidelines on the commercial sanitizing product

Hard plastic toys that are washed in a dishwasher or cloth toys washed in the hot water cycle of a washing machine do not need to be sanitized after washing.

Children in diapers should have only washable toys. Each group of children should have their own toys. Toys should not be shared with other groups. Stuffed toys used by only a single child should be cleaned in a washing machine every week or more frequently if heavily soiled.

Toys and equipment used by older children and not put into their mouths should be cleaned at least monthly and when obviously soiled. These types of toys and equipment include blocks, dolls, tricycles, trucks and other similar toys. A soap and water wash followed by clear water rinsing and air drying should be adequate. If wading pools are used, they must be filtered or emptied daily. Portable wading pools should be sanitized daily or more often if needed.

Water play tables can spread germs. To prevent this, it is recommended to:

- Sanitize the table with sanitizing solution before filling it with water.
- Sanitize all toys to be used in the table with sanitizing solution.
- Avoid using sponge toys. They can trap bacteria and are difficult to clean.
- Have all children wash their hands before and after playing in the water table.
- Do not allow children with open sores or wounds to play in the water table.
- Carefully supervise the children to make sure they don’t drink the water.
- Discard water after play is over.
WASHING AND SANITIZING BATHROOM AND OTHER SURFACES

Bathroom surfaces, such as faucet handles and toilet seats, should be cleaned when visibly soiled and sanitized daily.

(See also “Child care staff member Safety – Using Standard Precautions in Child Care” section.)

Surfaces that infants and young toddlers are likely to mouth, such as crib rails and toys, should be washed with soap and water and sanitized with a nontoxic sanitizer at least once every day, more often if visibly soiled and before use by another child. The sanitizer should be applied according to the manufacturer’s instructions. Be sure not to use a toxic cleaner on these surfaces.

To clean: Wash the surface or item with a detergent solution or other appropriate commercial product used for cleaning purposes. Questions about products must be directed to the manufacturer of the product. Follow the manufacturer’s instructions exactly.

To sanitize: Programs must use a commercial product registered by the US EPA as a sanitizer that has directions for use that are appropriate for the surface or item you are sanitizing. Questions regarding commercial products must be directed to the manufacturer of the product or the US EPA. Follow manufacturer’s instruction exactly when using any product to sanitize.

WASHING AND SANITIZING DIAPER CHANGING AREAS

Diaper changing areas should:

- Be used only for changing diapers.
- Be smooth and nonporous, such as laminate (NOT wood).
- Have a raised edge or low fence around the area to prevent a child from falling off.
- Be next to a sink with running water.
- Not be used to prepare food, mix formula or rinse pacifiers.
- Be easily accessible to staff.
- Be out of reach of children.

Diaper changing areas should be cleaned and sanitized after each diaper change as follows:

- Clean the surface with soap and water and rinse with clear water.
- Dry the surface with a paper towel.
- Thoroughly wet the surface with the sanitizing solution.
- Wipe dry or let air dry after two minutes.
WASHING AND SANITIZING CLOTHING, LINEN AND FURNISHINGS

Explain to parents that washing or rinsing soiled diapers and clothing increases the chances that you and the children may be exposed to germs that cause diseases. Although receiving soiled clothes isn’t pleasant, remind parents that this policy protects the health of all children and staff. According to OAC rules 5101:2-12-13 and 5101:2-13-13, programs must provide sanitary furniture, materials and equipment.

Each item of sleep equipment – including cribs, cots, mattresses, blankets, sheets, etc. – should be cleaned and sanitized before being assigned to a specific child.

The bedding items should be labeled with that child’s name and should be used only by that child. Children should not share bedding. Infants’ linens (sheets, blankets) should be changed weekly or more often as necessary, and crib mattresses should be cleaned and sanitized monthly and when soiled or wet. Blankets and/or sheets belonging to the child care program and used by children should be laundered weekly or more often if soiled. If a child accidentally uses another child’s bedding, the linen and mattress cover should be changed before allowing the assigned child to use it again. If a child has his/her own blanket and/or sheets, they should be sent home weekly to be laundered by the parents.

Children’s bedding and sleep surfaces should be stored so that they do not come into contact with those of other children.

CLEANING BODILY FLUID SPILLS

Spills of bodily fluids, including feces, nasal and eye discharges, saliva, urine, and vomit, should be cleaned up immediately. Bodily fluids can contain non-visible blood. It is recommended to always use gloves when handling any bodily fluids. Non-latex gloves must be used for cleaning up blood or blood-stained fluids. Clean and sanitize any surfaces, such as countertops and floors, on which bodily fluids have been spilled. Be sure to wash your hands after cleaning up any spill.

Child care providers should always wear gloves to clean up blood or bodily fluids. Gloves are used mainly when people knowingly contact or suspect they may contact blood or bodily fluids containing blood, including blood-containing tissue or injury discharge. These fluids may contain viruses such as HIV, hepatitis B or hepatitis C.

Be careful not to get any of the fluid you are cleaning in your eyes, nose, mouth or any open sores you may have. Clean and sanitize any surfaces such as countertops and floors, on which bodily fluids have been spilled. Discard fluid-contaminated material in a plastic bag that has been securely sealed. Mops used to clean up bodily fluids containing blood should be:

- Cleaned.
- Rinsed with a sanitizing solution.
- Wrung as dry as possible.
- Hung to dry completely.

Be sure to wash your hands after removing your gloves.

NOTE: See also “Child care staff member Safety - Using Standard Precautions in Child Care,” section.
<table>
<thead>
<tr>
<th>AREA/OBJECT</th>
<th>CLEAN</th>
<th>SANITIZE</th>
<th>FREQUENCY REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any item soiled with blood, fluids</td>
<td>X</td>
<td>X</td>
<td>Immediately</td>
</tr>
<tr>
<td>Blankets/sheets for cots or cribs</td>
<td>X</td>
<td></td>
<td>Weekly, when soiled and before another child uses.</td>
</tr>
<tr>
<td>Bottles, bottle caps, nipples and other equipment used for feeding</td>
<td>X</td>
<td>X</td>
<td>Clean and sanitize by washing in a dishwasher or by washing, rinsing and boiling them for one minute, before it can be reused.</td>
</tr>
<tr>
<td>Carpets</td>
<td>X</td>
<td></td>
<td>Vacuum weekly or when soiled. Clean when soiled.</td>
</tr>
<tr>
<td>Changing table</td>
<td>X</td>
<td>X</td>
<td>Clean when visibly soiled and sanitize after each use.</td>
</tr>
<tr>
<td>Cots/Pads/Mats</td>
<td>X</td>
<td>X</td>
<td>Before assigning to a different child, when soiled, and at least every 3 months.</td>
</tr>
<tr>
<td>Cribs</td>
<td>X</td>
<td>X</td>
<td>Monthly, when soiled and before another child uses.</td>
</tr>
<tr>
<td>Diaper receptacles</td>
<td>X</td>
<td>X</td>
<td>Daily or more frequently as needed to eliminate odor.</td>
</tr>
<tr>
<td>Dishes/cups/silverware/water containers</td>
<td>X</td>
<td>X</td>
<td>Clean after each use. Water containers that are labeled with the child's name can be used all day, but must be cleaned and sanitized before used again on another day.</td>
</tr>
<tr>
<td>Dress up clothes/hats (used in dramatic play)</td>
<td>X</td>
<td></td>
<td>Monthly and when soiled.</td>
</tr>
<tr>
<td>Floors</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food prep area, including sink</td>
<td>X</td>
<td>X</td>
<td>Before and after preparing food (including bottle preparation) and between preparing raw or cooked food.</td>
</tr>
<tr>
<td>Potty Chairs</td>
<td>X</td>
<td>X</td>
<td>After each use, empty contents into toilet, rinse with water, clean and sanitize.</td>
</tr>
<tr>
<td>Tables (food)/high chair trays</td>
<td>X</td>
<td>X</td>
<td>Before and after each use.</td>
</tr>
<tr>
<td>Tables (play)</td>
<td>X</td>
<td>X</td>
<td>Clean when visibly soiled. Sanitize daily.</td>
</tr>
<tr>
<td>Toilet bowls</td>
<td>X</td>
<td>X</td>
<td>Clean when visibly soiled. Sanitize weekly.</td>
</tr>
<tr>
<td>Toilet seats, handles and handicaps</td>
<td>X</td>
<td>X</td>
<td>Clean when visibly soiled. Sanitize daily.</td>
</tr>
<tr>
<td>Item</td>
<td>Frequency</td>
<td>Instructions</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Toys that go into the mouth</td>
<td>X</td>
<td>After each child’s use.</td>
<td></td>
</tr>
<tr>
<td>Toys-other than those going into the mouth</td>
<td>X</td>
<td>Monthly and when visibly soiled.</td>
<td></td>
</tr>
<tr>
<td>Washable furniture (including fabrics on infant equipment)</td>
<td>X</td>
<td>Weekly and when soiled; upholstered furniture must be steam cleaned when soiled, if not covered by a washable slipcover. Slipcovers must be washed at least monthly and when soiled.</td>
<td></td>
</tr>
<tr>
<td>Wastebaskets, including lids</td>
<td>X</td>
<td>Empty daily and more frequently as needed. Clean and sanitize when visibly soiled.</td>
<td></td>
</tr>
</tbody>
</table>

**FOOD SANITATION**

If you are a licensed food service operation, check with your local health department for food sanitation regulations. The following is general information for all child care providers.

Food sanitation is essential to prevent the spread of disease. Improperly handled or prepared food can cause illness. Infants and young children are especially at risk. Food-poisoning germs live everywhere and can carry disease through food and drink, including water. Kitchen cleanliness is very important. Bacteria are easily transferred to food.

To keep the kitchen area clean, follow these guidelines:

- To prevent cross contamination, do not use the same utensil or cutting board for both raw and cooked meat, poultry, fish or eggs unless they are sanitized between uses. A nonporous cutting board should be used.
- Clean and sanitize the counters and cutting boards after each use.
- The area first must be cleaned of food or dirt. If this step is skipped, then the sanitizing solution will not be able to sanitize the surface.
- Use clean utensils and containers.
- Use a disposable hand towel or paper towels to wipe hands and spills.
- Rinse the top of cans before opening.
- Do not prepare or handle food if you are ill.
Follow these Core Four Practices:

- **Clean**
  - Wash hands and surfaces often

- **Separate**
  - Don’t cross-contaminate

- **Cook**
  - Cook to the safe internal temperature

- **Chill**
  - Refrigerate promptly

Wash hands as often as necessary to remove soil and contamination. Poor personal hygiene, contaminated equipment, poor protection from contamination and improper holding temperatures have been identified by the U.S. Food and Drug Administration as food-borne illness risk factors. Remember to keep hot foods hot and cold foods cold, and never leave food at room temperature for more than two hours. Poor food preparation, handling or storage can quickly result in food being contaminated with germs and may lead to illness if the contaminated food is eaten. Contact your local health department to obtain the local regulations and standards for food safety and sanitation and to ask about the availability of a food handler course in your area.

The most efficient way to wash, rinse and sanitize dishes and eating utensils is to use a dishwasher. The dishwasher must be of a commercial type to ensure a proper final rinse temperature is attained to sanitize dishes and eating utensils. If a dishwasher is not available, a three-compartment sink is needed to wash, rinse and sanitize dishes. If your program does not include a licensed food service operation, a two-compartment or one-compartment sink may be used by adding one or two dishpans as needed. In addition to three compartments or dishpans, you will need a dish rack with a drain board to allow dishes and utensils to air dry. Be sure to sanitize dishpans after each use.

To wash, rinse and sanitize dishes by hand:

- Fill one sink compartment or dishpan with hot tap water (approximately 100°F) and a dishwashing detergent.
- Fill the second compartment or dishpan with hot tap water (approximately 100°F).
- Fill the third compartment or dishpan with lukewarm or cool (70-75°F) tap water and the amount of sanitizer detailed in the manufacturer’s instructions on the sanitizer.
- Scrape dishes and utensils and dispose of excess food.
- Immerse scraped dish or utensil in first sink compartment or dishpan and wash thoroughly.
- Rinse dish or utensil in second dishpan of clear water.
- Immerse dish or utensil in third dishpan of chlorinated water for at least one minute.
- Place dish or utensil in rack to air dry.
PREPARING AND HANDLING INFANT FORMULA AND FOODS

Babies are more susceptible to bacteria and other germs than older children. Unsanitary food conditions can cause serious infections. Extra care needs to be taken when handling babies’ food, bottles and utensils to make sure they are safe and clean.

BREAST MILK

- Should be in the infant’s own bottle.
- The child’s name, date pumped and date the bottle was prepared shall be on each bottle.
- Breast milk may be stored in the refrigerator for up to five days, counted from the day the breast milk was pumped. Frozen breast milk may be stored up to two weeks in a freezer compartment inside a refrigerator or three to six months inside a freezer compartment of a refrigerator with separate doors.
- Do not refreeze thawed breast milk.
- Breast milk left in the bottle after feeding must not be reheated or served again.
- When using frozen breast milk stored in plastic bags, be sure the milk is placed in a sterile plastic bottle liner or a clean and sanitized bottle for feeding.

NOTE: According to the CDC, breast milk is not a biohazard and does not require standard precautions when being handled.

INFANT FORMULA

OAC rules 5101:2-12-23 and 5101:2-13-23 state that if bottles are prepared by the center or the family child care home, they must be prepared in accordance with written instructions from the parents or physician in charge of the child. All powdered or concentrated formula must be prepared according to the manufacturer’s instructions. It is recommended to use water from a source approved by the local health department if the program does not have access to a public water system.

Before preparing formula, all equipment to be used (bottles, nipples, caps, spoons, can opener) must be cleaned and sanitized by washing in the dishwasher or by washing thoroughly with hot water and detergent, followed by a thorough rinsing in hot running water and then boiling for one minute or more just prior to filling. Prepared formula not used immediately must be labeled, refrigerated and sent home daily. Open containers of ready-to-feed or concentrated formula must be covered, dated and refrigerated according to the manufacturer’s instructions. Prepared formula and food must be sent home daily. Formula left in the bottle after feeding is not to be reheated or served again.

The program shall comply with written feeding instructions from the infant’s parent, physician, physician’s assistant, or certified nurse practitioner (CNP) which shall include:

- Type of food and/or formula/breastmilk.
- Amount of food and/or breastmilk.
- Feeding times or frequency of feedings.
UNIT 3 - CARE OF THE WELL AND ILL CHILD

GROUP SEPARATION OF CHILDREN

The risk of illness and injury can be reduced by separating older children from children under 30 months of age. The presence of infants and toddlers who are still in diapers poses a higher risk for the spread of diarrheal diseases and hepatitis A. Separating groups of children can help to keep infectious diseases of one group from spreading to other groups.

EXCLUSION FOR ILLNESS IN A CHILD

Illness for children is not an unusual event. OAC rules 5101:2-12-16, 5101:2-13-16 3301-37-04 and 3301-37-11 require that child care programs have written policies and procedures for managing children with illnesses that may be communicable. The chart below lists the symptoms that require children to be separated from others.

SIGNS AND SYMPTOMS OF ILLNESS

<table>
<thead>
<tr>
<th>SYMPTOMS</th>
<th>PROGRAM RESPONSIBILITY</th>
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</thead>
<tbody>
<tr>
<td>Temperature of at least 101°F (100°F if axillary), when in combination with other signs and symptoms of illness</td>
<td>Per regulations:</td>
</tr>
<tr>
<td>*Could be life-threatening if combined with lethargy, vomiting, extreme tiredness and/or difficulty to wake</td>
<td>A child with any of these signs or symptoms must be immediately isolated and discharged to his or her parent or guardian or the person designated by the parent or guardian. These are signs of probable illness.</td>
</tr>
<tr>
<td>*Difficult or rapid breathing</td>
<td>*A Family Child Care (FCC) provider shall decide if he or she will care for sick children. If yes, the child does not have to be immediately discharged.</td>
</tr>
<tr>
<td>*Severe coughing, causing the child to become red or blue in the face or to make a whooping sound</td>
<td>*Sign of possible immediate life-threatening situation. Call the emergency squad and call parents.</td>
</tr>
<tr>
<td>Vomiting more than one time or when accompanied by any other sign of symptom of illness</td>
<td>Observe child closely</td>
</tr>
<tr>
<td>Diarrhea (three or more abnormally loose stools within 24 hours)</td>
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<tr>
<td>Yellowish skin or eyes</td>
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<tr>
<td>Redness of the eye or eyelid, thick and purulent (pus) eye discharge, matted eyelashes, burning, itching or eye pain.</td>
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<tr>
<td>Untreated infected skin patches, unusual spots or</td>
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<tr>
<td>Unusually dark urine and/or gray or white stool</td>
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<tr>
<td>Stiff neck with an elevated temperature</td>
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<tr>
<td>Evidence of untreated lice, scabies or other parasitic</td>
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<tr>
<td>Sore throat or difficulty in swallowing</td>
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</tr>
<tr>
<td>Earache</td>
<td></td>
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<tr>
<td>Headache</td>
<td></td>
</tr>
<tr>
<td>Fever more than 101°F (100°F if taken axillary)</td>
<td></td>
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<tr>
<td>Fussiness</td>
<td></td>
</tr>
<tr>
<td>Runny nose</td>
<td></td>
</tr>
<tr>
<td>Mild cough</td>
<td></td>
</tr>
</tbody>
</table>
Irritable, crying, unusual behavior

**NOTE:** Children with special health care needs may require quicker/different responses. These guidelines should be spelled out in the child’s Medical/Physical Care Plan.

For a life-threatening and probable illness that might be communicable, according to OAC 5101:2-12-16 and 5101:2-13-16, the child must be isolated and discharged (unless cared for by an FCC provider). It is important that the child care provider call and discuss the child’s illness with the parents.

**TAKING A TEMPERATURE**

When observing the child, it is important to take the child’s temperature. You cannot tell how high a fever is by just feeling the child’s skin. Ohio child care rules allow only digital thermometers to be used. Temperature can be taken using any method. Any temperature of at least 101° is considered high, 100° if taken axillary (armpit). The normal axillary temperature is 97.6°.

To take an axillary temperature:

1. Check to see that the child’s armpit is dry.
2. Place the digital thermometer under the child’s arm. Fold the child’s arm around his or her chest to keep the thermometer in place.
3. Follow the directions that come with the thermometer.
4. Do not leave the child alone while taking the temperature.
5. Record the temperature in degrees and note that it was taken by the axillary method. Report the temperature to the parents.
6. Sanitize the thermometer after each use. Use the manufacturer’s guideline for sanitizing the thermometer.

**REMEMBER:** Do not add or subtract a degree when determining a child’s temperature. When determining whether a child has a temperature, use the actual reading. If the axillary temperature is 100°F, then indicate in the child’s record that the temperature was 100°F axillary.

Fever is a symptom, not an illness. It means the child’s body temperature is above his or her normal temperature for that time of day. Younger children have fevers more often than older children. Increased body temperature can result from such things as infection, intense exercise or overdressing. High fevers don’t always mean serious illness; in fact, low fevers of less than 102°F (when measured under the arm) can help the child fight infection.

If the child has a fever, dress the child in lightweight clothing to help prevent the temperature from rising further. Have the child drink cool, clear fluids because fevers can quickly cause dehydration. Do not give aspirin to children to control a fever. Aspirin can cause Reye’s syndrome in children. Reye’s syndrome affects the liver and brain, causes the abrupt onset of seizures, and in some cases, can cause death. For this and other reasons, aspirin should never be given to any child.
In developing a policy on caring for sick children until the parent comes to pick the child up, consider:

- Is there an area where the child can be isolated from others to prevent spreading germs?
- Would I be able to take the child to a doctor or hospital if the child got worse and the parent was unavailable?

If the child is isolated for discharge, the following steps must be observed:

- Place the child in a room or portion of a room not being used for other types of child care.
- Do not leave the child alone or unsupervised.
- Make the child comfortable; provide the sick child with a cot or mat or the sick infant with a crib.
- Maintain continued observation of the child by a staff member to see if the condition worsens or if new symptoms develop. Notify the child’s parent(s) immediately if the child’s condition worsens.
- Record observations.
- Launder bedding and wash toys used by the sick child before use by another child.
- Sanitize the thermometer after each use.

**STAFF AND CHILD RE-ADMITTANCE CRITERIA**

The criteria for exclusion and re-admittance represent the recommendations of ODH and/or are in law (OAC 3701-3-13); please refer to this law for details. Below are some examples of criteria of exclusion and re-admittance, this list is not all inclusive.

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>READMIT TO THE CHILD CARE PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Campylobacteriosis</em></td>
<td>Staff may return after diarrhea has ceased for 24 hours provided no food handling is involved in their duties. If food handling is involved, they may return after diarrhea has ceased and after 48 hours of effective antimicrobial therapy. If not treated with antimicrobial therapy, they may return to work after diarrhea has ceased and after two consecutive follow-up stool specimens are negative for <em>Campylobacter</em>. A child may return to the child care program after diarrhea has ceased for 24 hours.</td>
</tr>
<tr>
<td>Chickenpox</td>
<td>Staff and children with chickenpox shall be excluded until the sixth day after onset of rash or until all lesions are dry, whichever comes</td>
</tr>
<tr>
<td>Condition</td>
<td>Exclude/Return Criteria</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Conjunctivitis</strong></td>
<td>Staff and children with purulent (pus) conjunctivitis should be excluded until 24 hours after the start of effective antimicrobial therapy (if ordered by health provider). A child with viral conjunctivitis (pink, swollen, watering eye(s) sensitive to light) may still be included in the setting, but if any purulent drainage is present they must be excluded.</td>
</tr>
<tr>
<td><strong>Cryptosporidiosis</strong></td>
<td>Staff may return after diarrhea has ceased for 24 hours provided no food handling is involved in their duties. If food handling is involved, they may return after diarrhea has ceased and after three consecutive follow-up stool specimens are negative for Cryptosporidium. A child may return to the child care program after 24 hours of ceased.</td>
</tr>
<tr>
<td><strong>Diarrhea illness</strong></td>
<td>Diarrhea is defined as three or more loose stools in a 24-hour period. Staff or children with diarrhea of unidentified, possibly infectious cause shall be excluded from the child care program. Staff and children may return after diarrhea has resolved for 24 hours. Exclusion of persons with diarrhea of known infectious cause shall be in accordance with regulations pertaining to the infectious disease.</td>
</tr>
<tr>
<td><strong>Diphtheria</strong></td>
<td>Staff and children may return after two cultures from both throat and nose (and skin lesions in cutaneous diphtheria) taken not less than 24 hours apart, and not less than 24 hours after cessation of antimicrobial therapy, fail to show diphtheria bacilli. If culturing is unavailable or impractical, exclusion may be ended after 14 days of effective antimicrobial therapy.</td>
</tr>
<tr>
<td><strong>E. coli 0157:H7 or Hemolytic Uremic Syndrome (HUS)</strong></td>
<td>Staff and children may return after diarrhea has ceased for 24 hours and after two consecutive follow-up stool specimens are negative for <em>E. coli</em> 0157:H7.</td>
</tr>
<tr>
<td><strong>Giardiasis</strong></td>
<td>Staff and children may return after diarrhea has ceased for 24 hours and after 72 hours of effective antimicrobial therapy. If not treated with antimicrobial therapy, they may return to work after diarrhea has ceased and after three consecutive follow-up stool specimens are negative for Giardia.</td>
</tr>
<tr>
<td><strong>Hepatitis A</strong></td>
<td>Symptomatic staff and children shall be excluded until 10 days after initial onset of symptoms.</td>
</tr>
<tr>
<td><strong>Impetigo</strong></td>
<td>Staff and children may return 24 hours after initiation of an effective antimicrobial therapy and all lesions (sores) are dry or able to be covered by clean, dry bandages at all times.</td>
</tr>
<tr>
<td><strong>Measles</strong></td>
<td>Staff and children shall be excluded for four days following rash</td>
</tr>
<tr>
<td><strong>Meningitis (Bacterial)</strong></td>
<td>Excluded until at least 24 hours of effective treatment. Must be under physician's care.</td>
</tr>
<tr>
<td><strong>Mumps</strong></td>
<td>Staff and children shall be excluded for five days after the onset of parotid glands swelling.</td>
</tr>
<tr>
<td><strong>Pediculosis (Lice)</strong></td>
<td>Staff or children with body lice may return 24 hours after application of an effective pediculocide. Staff or children with head lice may return after the first treatment with an effective pediculocide.</td>
</tr>
<tr>
<td>Disease</td>
<td>Exclusion Criteria</td>
</tr>
<tr>
<td>---------------------------------</td>
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</tr>
<tr>
<td><strong>Pertussis (whooping cough)</strong></td>
<td>Staff and children shall be excluded for five days after initiation of effective antimicrobial therapy. If the case is not treated with effective antimicrobial therapy, the staff member or child shall be excluded until three weeks after the onset of paroxysms (fit of abnormally severe coughing).</td>
</tr>
<tr>
<td><strong>Rash with fever or joint pain</strong></td>
<td>Staff and children shall be excluded until measles, rubella or other communicable diseases are ruled out.</td>
</tr>
<tr>
<td><strong>Rubella</strong></td>
<td>Staff and children shall be excluded for at least seven days after the onset of rash. Persons with congenital rubella shall be excluded until they are one year old unless nasopharyngeal and urine cultures after three months of age are repeatedly negative for rubella.</td>
</tr>
<tr>
<td><strong>Salmonellosis</strong></td>
<td>Staff may return after diarrhea has ceased for 24 hours provided no food handling is involved in their duties. If food handling is involved in their duties, they may return after diarrhea has ceased and after two consecutive follow-up stool specimens are negative for Salmonella. A child may return to the child care program after diarrhea has ceased for 24 hours.</td>
</tr>
<tr>
<td><strong>Scabies</strong></td>
<td>Staff and children shall be excluded for 24 hours following the initial treatment with an effective scabicide. A person with crusted scabies shall be excluded until the mite can no longer be demonstrated on a scabies preparation.</td>
</tr>
<tr>
<td><strong>Shigellosis</strong></td>
<td>Staff and children may return to work after diarrhea has ceased for 24 hours and after two consecutive follow-up stool specimens are negative for Shigella.</td>
</tr>
<tr>
<td><strong>Shingles</strong></td>
<td>If sores cannot be covered by clothing or a dressing, exclude until sores have crusted and are dry. A person with active shingles should not care for immune-suppressed children.</td>
</tr>
<tr>
<td><strong>Strep throat or other streptococcal infection</strong></td>
<td>Staff and children shall be excluded for 24 hours after the initiation of effective antimicrobial therapy.</td>
</tr>
<tr>
<td><strong>Tuberculosis (TB)</strong></td>
<td>Staff and children with confirmed or suspected TB shall be excluded from the child care program until the local designated TB authority approves the person’s return to the program.</td>
</tr>
<tr>
<td><strong>Typhoid fever</strong></td>
<td>Staff and children may return when asymptomatic and after three consecutive follow-up stool specimens are negative for Salmonella typhi.</td>
</tr>
<tr>
<td><strong>Vomiting</strong></td>
<td>Staff and children may return when vomiting resolves or is determined to be due to a noninfectious condition such as pregnancy or a digestive disorder.</td>
</tr>
<tr>
<td><strong>Yersiniosis</strong></td>
<td>Staff and children may return after diarrhea has ceased for 24 hours provided no food handling is involved in their duties. If food handling is involved, they may return after diarrhea has ceased and after two consecutive follow-up stool specimens are negative for Yersinia.</td>
</tr>
</tbody>
</table>
UNIT 4 - POLICIES AND PROCEDURES

LOCAL HEALTH DEPARTMENTS

If a parent or physician notifies the child care program that a child has a communicable disease, the other parents with children in the child care program and the local health department (LHD) must be notified. The sooner a disease or outbreak is reported, the better the chance for preventing new cases. Some diseases require special efforts to control.

The LHD is concerned about the health of the public and provides help controlling and preventing communicable diseases, including diseases in child care settings. The LHD is responsible for any communicable disease investigations. The LHD can provide information on how to control the spread or increased incidence of an illness (such as diarrhea) in the program; answers to questions about sanitation and health issues; informative letters to send to parents and/or physicians about a disease; and in some situations, free stool-specimen testing in your community. The phone number of the LHD should be written in your policy and procedure manual on how to manage communicable diseases.

COMMUNICABLE DISEASES THAT MUST BE REPORTED

If someone in the child care program has a medically confirmed case of a communicable disease, you have the authority to contact your LHD with all the facts related to the case (OAC 3701-3-03 (c)). Communicable diseases (including outbreaks) that must be reported to the LHD are listed in OAC 3701-3-02. Closing a program is not usually recommended because parents may place their child in another child care setting, which could facilitate the spread of disease.

FIRST AID KIT

One first aid kit must be on the premises and readily available but kept out of the reach of children. For child care centers, there must be one first aid kit for every 75 children, and one must be on each floor if the program has multiple floors. The supplies for a complete kit are outlined in OAC rules 5101:2-12-16 and 5101:2-13-16. If the kit contains more than the items required in the rule, then the additional items must be clearly labeled with the names of whom they can be administered to.

OHIO CHILD CARE RULES RELATED TO CHILD HEALTH AND COMMUNICABLE DISEASES

Every child care program is required to have written policies and procedures for the following items:

Medical, dental and general emergency plans. These must be written according to OAC rules 5101:2-12-16, 5101:2-13-16 and 3301-37-04. At a minimum, they must contain the following:
• General instructions to staff in general emergency situations and instructions for serious incidents, injuries or illnesses affecting a child.
• A list of staff trained in first aid, communicable disease and CPR.
• Process for notification of parents.
• Location of first aid kit, Dental First Aid Chart (JFS 01201) and children's records.
• Emergency phone numbers, such as an emergency response number, poison control center, fire, and police.
• Procedures for standard precautions such as blood spills and disposal of contaminated materials.

In addition, the American Public Health Association (APHA) recommends the following:
• Post and monitor hand-washing and sanitation procedures.
• Ask parents to notify the program within 24 hours after the child has developed a suspected communicable disease, or if any member of the immediate household has a communicable disease.
• Create a policy for managing communicable disease among the child care staff members. This should include:
  o The procedure and criteria for excluding and readmitting staff because of illness.
  o The process for educating female staff of the health risk if they are pregnant or become pregnant while employed.

UNIT 5 - APPENDIX

REFERENCES


RESOURCES

ODH’s website listing Ohio’s Reportable Infectious Diseases: odh.ohio.gov/wps/portal/gov/odh/know-our-programs/infectious-diseases

Find your local health department:

odhgateway.odh.ohio.gov/lhdinformationsystem/Directory/GetMyLHD
DEFINITIONS

CLEAN: To remove dirt and debris (such as blood, urine and feces) by scrubbing and washing with a detergent solution and rinsing with water.

DISINFECT: To eliminate virtually all germs from inanimate surfaces through the use of chemicals (for example, products registered with the EPA as “disinfectants”) or physical agents (for example, heat).

SANITIZE: To remove filth or soil and small amounts of certain bacteria. For an inanimate surface to be considered sanitary, the surface must be clean, and the number of germs must be reduced to such a level that disease transmission by that surface is unlikely. This procedure is less rigorous than disinfection and is applicable to a wide variety of routine housekeeping procedures involving, for example, bedding, bathrooms, kitchen countertops, floors and walls. To clean, detergent or abrasive cleaners may be used. To sanitize, an additional sanitizer solution must be applied. A number of EPA-registered “detergent/disinfectant” products also are appropriate for sanitizing. Directions on product labels should be followed closely. Sanitizing food utensils can be accomplished by using a dishwasher or equivalent process, usually involving more dilute chemicals than are required for other surfaces.

STANDARD PRECAUTIONS: Minimum infection prevention practices. Although standard precautions were designed to apply to hospital settings, they also apply to child care settings (with the exceptions detailed in this definition). Standard precautions include such things as proper hand hygiene, use of protective barriers such as gloves, gowns and masks and the safe handling of potentially contaminated equipment or surfaces. Standard precautions define all bodily fluids and substances, except sweat and breast milk, as potentially infectious and include exposure to non-intact skin and mucous membranes.

UNIVERSAL PRECAUTIONS: Actions to prevent the transmission of infection from blood, other bodily fluids containing blood, and semen and vaginal secretions, but not from feces, nasal secretions, sputum, sweat, tears, urine, saliva and vomitus unless they contain visible blood or are likely to contain blood. Universal precautions include avoiding injuries caused by sharp instruments and the use of protective barriers such as gloves, gowns, aprons, masks or protective eyewear.

Definitions taken from U.S. Centers for Disease Control and Prevention, American Public Health Association, American Academy of Pediatrics, the National Resource Center for Health and Safety in Child Care, and Caring for Our Children-National Health and Safety Performance Standards: Guidelines for Early Care and Education Programs, Third Edition.
John R. Kasich, Governor
Cynthia C. Dungey
ODJFS Director
Lance Himes
ODH Director
JFS 01279 (Rev/ 11/2018)
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