

Child Care Training and Resource Kit
Communicable Disease

Handout

A MESSAGE FROM YOUR HEALTH DEPARTMENT

HOW SICKNESS SPREADS

Working in a child care setting involves frequent exposure to childhood diseases. Children can spread many diseases to adults who take care of them. Even children who show no signs of illness may be carriers of infections. The following chart shows the different ways communicable diseases can spread.

DISEASES SPREAD THROUGH:				
Direct Contact	Saliva and Urine	Stool	Eye, nose, throat, lung secretion	BLOOD
Head lice Impetigo Ringworm Scabies Cold Sores	Cytomegalovirus (CMV)	Infectious diarrhea Hepatitis A Pinworms Hand-Foot-and Mouth disease	Conjunctivitis Meningitis Streptococcus- Infections Influenza* Measles* Mumps* Rubella* Chickenpox Fifth Disease Hand-Foot-and Mouth disease	Hepatitis B* HIV

Precautions:

- ◆ Follow the Health Department's recommendations for proper handwashing, diapering, cleaning, and disinfecting,
- ◆ Evaluate your immunity to childhood diseases. If you need help, call your health department for advice or talk to your health care provider. Disease marked with an asterisk (*) are vaccine preventable.
- ◆ If you are pregnant or considering pregnancy, tell your health care provider that you work with young children.

A MESSAGE FROM YOUR HEALTH DEPARTMENT

Health Risks for Pregnant Child Care Providers

Chickenpox (Varicella)

- Chickenpox is usually a mild, but very contagious childhood disease caused by a virus.
- If a pregnant woman who has never had chickenpox is exposed to it, she should contact her doctor for possible treatment.
- First time exposure to chickenpox during pregnancy may cause multiple birth defects, severe (sometimes fatal) disease for the newborn, or miscarriage, depending when the mother is exposed to the virus.
- A vaccine against chickenpox may be available in the near future.

Cytomegalovirus (CMV)

- CMV is a very common virus that causes little or no disease in healthy children and adults.
- Most people have been exposed to the CMV virus and have developed immunity to it.
- If a pregnant woman is infected with CMV for the first time during pregnancy, the virus may damage the fetus or the newborn baby. It may cause hearing loss and sometimes even more serious complications, such as seizures, mental retardation, deafness, and/or blindness.
- Child care workers who care for children under the age of two years are at increased risk of being exposed to the CMV virus.
- There is currently no vaccine against CMV.

Fifth Disease (erythema infectiosum)

- Fifth Disease (sometimes called “slapped cheek’s disease”) is a common childhood rash caused by a virus. The infection occurs most commonly in school-aged children but can spread to their younger siblings attending child care.
- Women who are exposed to fifth disease for the first time during pregnancy may have an increased risk of fetal damage even death. If you are pregnant and you have been exposed to fifth disease contact your doctor for advice. Most adult women already are immune to fifth disease and therefore are not at risk.
- There is currently no vaccine against fifth disease.

RUBELLA

- Rubella is a mild illness in children but can be more severe in adults. It can be prevented through immunization.
- If a pregnant woman who is not immune to rubella gets the disease during the first three months of her pregnancy, it may cause fetal heart damage, mental retardation, miscarriage or stillbirth.
- See the Health Department's Recommendations for the Immunization of Child Care Workers and consult your health care provider if you are unsure about your immunization status.

Precautions:

- ✚ Follow the Health Department's Recommendations for proper handwashing – diapering, cleaning, and dis-infection.
- ✚ Evaluate your immunity to childhood diseases. If you need help, call your health department for advice or talk to your health care provider.
- ✚ If you are pregnant or considering pregnancy, tell your health care provider that you work with young children.

For more information, consult your health care provider or call the Health Department.

DAILY HEALTH CHECK GUIDE

Each child should be greeted individually by the staff as they board the bus, or enter the classroom, both to make them comfortable and to assess their overall well being, in a brief and informal manner. To do this effectively the following guideline can assist in this activity.

LISTEN

- Greet the child and see how he/she is doing.
- Listen to the response. Note any complaints, i.e., stomach ache, sore throat, etc.
- Listen for congestion, cough, difficulty breathing.

LOOK

- Look at his/her general appearance and how he/she is behaving.
- Look at her/his head for lumps, bumps, cuts, skin infections or lice. Is s/he scratching her/his head excessively?
- Look at his/her ears for discharge, redness and/or warmth of the ear. Does he/she seem to hear well?
- Look at her/his eyes for discharge, watering, redness, crusting. Does s/he blink excessively?
- Look at his/her mouth for swellings, sores, coated or cracked lips.
- Look at her/his nose. Is it runny, crusty? Is s/he coughing? Does s/he have swollen glands in her/his neck?
- Look at the skin on his/her face, arms, lips, and body for rashes, sores, boils, infected cuts, bites, scratches, or bruises (new or old).

FEEL

- Feel his/her skin, by running your hand over the child's forehead, neck, or cheek. Is it warmer than usual to the touch? Is it unusually bumpy?

SMELL

- Smell for unusual odors, such as: breath that smells fruity or foul. Does the child smell of urine, or stool, indicating possible diarrhea or other problems?
- Make a note of any observations that MIGHT indicate illness, or the beginning of an illness. Follow exclusion procedures if indicated by health check.

OVERALL OBSERVATIONS

Does she look well? Is s/he frequently tired? Does he/she have any peculiarity of gait (walking, standing? Is there a limp?) Is the child generally clean and well kept?

Because we love your kids...

We follow the advice of Department of Public Health in preventing children with certain symptoms of communicable diseases from attending child care.

If your child has any of these symptoms, please keep them home, or make appropriate arrangements for their care.

- ♥ Diarrhea - 3 or more watery stools in 24-hour period, especially if the child acts or looks ill.
- ♥ Rash - body rash, especially with fever or itching. Diaper rashes, heat rashes and allergic reactions are not contagious.
- ♥ Eyes - thick mucus or pus draining from the eye, or pink eye.
- ♥ Sick appearance, Behavior - unusually tired, pale lack of appetite, difficult to wake, confused or irritable. This is sufficient reason to exclude a child from group child care.
- ♥ Lice, Scabies - Children must not return to child care until they are free of lice and nits (eggs.) Children with scabies can be admitted after treatment.
- ♥ Fever - temperature of 100°F or higher (taken under the arm) AND sore throat, rash, vomiting, diarrhea, earache, irritability or confusion. Fever by itself is usually not sufficient reason to keep a child out of day care.
- ♥ Sore throat - especially with fever or swollen glands in the neck.
- ♥ Vomiting - vomiting 2 or more times within the past 24 hours.

Note: Children with mild cold symptom AND who do not have any symptom described above do not need to be excluded from day care.

Please do the following if your child develops:

- ♥ **Children with chronic** greenish nose discharge, and/or a chronic cough, should be seen by a health care provider.
- ♥ **Cough** – Take your child to your health care provider if your child has a cough that lasts more than one week, or is followed by vomiting.
- ♥ **Chicken Pox**- Bring your child back to child care once the pox are all scabbed over.
- ♥ **Ear infections** do not need to be excluded, but the child needs to get medical treatment and follow-up. Untreated ear infection can cause permanent hearing loss.
- ♥ **Lice** – treat your child, remove all lice and nits (eggs), and then your child can return to child care.
- ♥ **Scabies** – Treat your child and your child may return to child care.

While we regret any inconvenience this may cause, we will enforce this policy to protect the children care and staff from unnecessary exposure to communicable disease. If you have any questions, please ask us. However, our Director reserves the right to make the final decision.

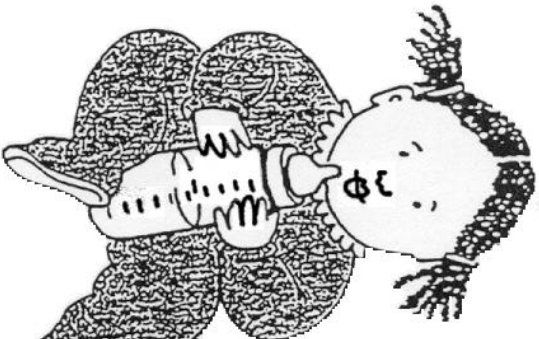
For more information you may also call the Child Care Health Staff at the Health Department at:

(Health Department Phone Number

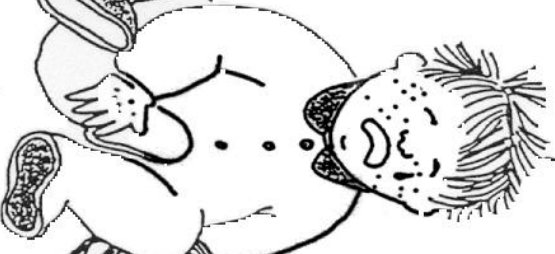
Child Care Director

KEEP ME HOME IT...

I'm Vomiting



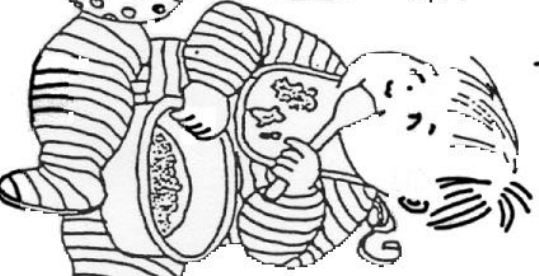
I have a rash, lice or nits



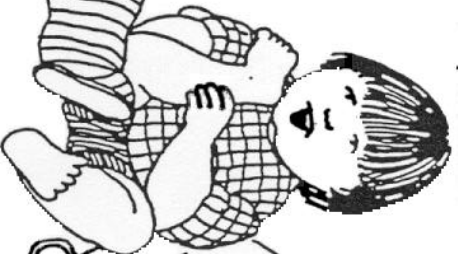
I have diarrhea



I have an eye infection



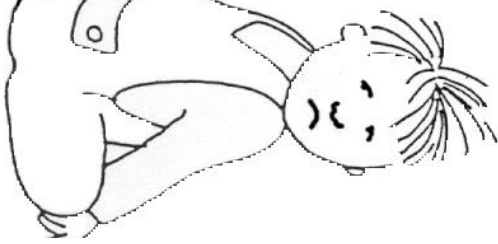
I have a sore throat



I'm just not feeling very good.



I have a fever



Two or more times in 24 hours.

Body rash, especially with a fever or itching. Lice or nits.

3 or more watery stools in 24 hours.

Thick mucus or pus draining from the eye.

With fever or swollen glands.

Unusually tired, pale, lack of appetite, confused or cranky.

Temperature of 100°(F) or more, (taken under the arm) AND sore throat, rash vomiting, earach diarr hea, earach or just not feeling good.

Seattle-King County Department of Public Health

When Your Child is Sick:

1. Have plans for back up child care.
2. Tell your caregiver what is wrong with your child, even if your child stays home.

1 ☐ COMMUNICABLE DISEASES

2 ☐ Transmission

- 1 ■ Direct transmission: Contact with infected person/secretions.
- 2 ■ Indirect transmission: Contact with something that has been in contact with infectious agent.

3 ☐

- Diseases are caused by germs or bugs

4 ☐ All types of bugs need food, water and warmth to grow.

5 ☐ How Germs are Spread

- 1 ■ Through human waste.
 - Through other body fluids.
 - Through direct skin contact.
 - By touching an object with germs (droplet).
- 2 ■ In the air we breathe (aerosol).
 - Food left at room temperature too long or improperly prepared.

6 ☐ The most important preventive measure: HANDWASHING

- After toileting and diaper changes.
- After touching any body fluid.
- Before and after food preparation and eating.
- Between children.

7 ☐ Other preventative measures

- Wash toys daily in infant and toddler rooms with 1/4 teaspoon bleach to 1 quart water.
- Spray surfaces with this disinfecting spray after diaper changes, after play, before meals.
- Cover sneezes and coughs with tissues, then discard and wash hands.

8 ☐ Other preventative measures

- Follow recommended procedures for food handling, including formula and breast milk.

9 ☐ Exclusion Criteria

- Diarrhea
- Vomiting
- Eye drainage and redness
- Rashes (not diaper, heat or allergic)

- Sore throat with a fever
- Appearance/Behavior indicative of illness

10 ☐ **RHINOVIRUS**

- The cause of the common cold.
- There are more than 100 types.
- Contagious 1-10 days.
- Nasal mucus: 10-100 times more virus than throat secretions.
- Survives well on wood, plastic and skin.

11 ☐ **ADENOVIRUS**

- There are 47 types.
- Mild to severe illness.
- Transmitted by respiratory secretions.
- Portal of entry: eyes and nose.
- Communicable 1 day to many months.

12 ☐ **PARAINFLUENZA**

- Affects upper and lower respiratory tracts.
- Major cause of croup.
- Usually seen in children aged 3 months to 3 years.
- Begins suddenly and at night.

13 ☐ **INFLUENZA**

- Epidemics: Winter and Geography
- Simultaneous circulating types
- Spread by respiratory secretions
- Contagious 1-7 days
- There is a vaccine

14 ☐ **RESPIRATORY SYNCYTIAL VIRUS**

- The most common respiratory pathogen in children.
- Almost all children infected by age 3.

15 ☐ **RSV Airway**

16 ☐ **FUN FACTS TO SURVIVE VIRUS SEASON**

- It's normal to cough for 2-3 weeks after you've survived a virus.
- The worse the virus, the longer you are going to cough when it's gone.
- Coughing longer than 6 weeks is not normal.

17 ☐ **Conjunctivitis: Clinical Findings**

- Redness

- Burning, stinging, or itching
- Light-sensitive
- Sticky, pus-like discharge
- Matted eyelashes

18 ☐ **Treatment and Education**

- May need topical antibiotics.
- Highly contagious.
- Wash eye inside to outside.
- Warm soaks for comfort.
- Wash hands frequently.

19 ☐ **Anatomy of the Ear**

20 ☐ **Otitis Media (middle ear infection)**

- Very common.
- Clinical Findings:
 - Ear pain, loss of hearing
 - Tiredness, dizziness
 - Ringing in ears
 - Fever
 - Stuffy or runny nose
 - Blood or pus from the ear

21 ☐ **Yeast or Thrush
(Candidiasis)**

- White patches to mouth.
- Rash to diaper area that doesn't respond to usual ointments.
- Both require prescription medications.
- Oral thrush-excluded until on treatment.

22 ☐ **Streptococcal Infections**

- Transmission: upper respiratory tract secretions.
- Communicable: onset of symptoms up to a few months in the untreated person.

23 ☐ **Strep pharyngitis (sore throat)**

- Incubation period is 2-5 days.
- Clinical Findings:
 - Abrupt onset sore throat, difficulty swallowing
 - Fever
 - Tiredness
 - Headache

- 24 ☐ **Impetigo**
- Acquired by direct physical contact with an infected person.
 - Incubation is 7-10 days.
 - Clinical Findings:
 - Honey-colored scab on a reddened base
 - Swollen lymph glands
- 25 ☐ **Clinical Findings for Scarlet Fever**
- 1
- Sore throat
 - High fever
 - Headache
 - Tiredness
 - Vomiting
- 2
- Red coated tongue
 - Sandpaper-like rash 12-24 hours after other symptoms.
- 26 ☐ **Treatment for all Strep infections**
- Antibiotics
 - Fever medication
 - Fluids, Rest, TLC
 - Follow-up appointment to re-culture
 - Exclusion: Until on antibiotics 24 hours.
- 27 ☐ **Hand, Foot and Mouth Disease**
Coxsackie A
- Sores in mouth, on hands and on the soles of the feet.
 - Rash on the buttocks.
 - Fever or headaches.
 - Disease lasts 7-10 days and is mild.
- 28 ☐ **Coxsackie: Treatment and Exclusion**
- There is no treatment required.
 - No exclusion necessary, but avoid contact with nose, mouth discharge and feces of the infected person.
- 29 ☐ **GOOD HANDWASHING IS EXTREMELY IMPORTANT IN THE CONTROL OF THIS ILLNESS**
- 30 ☐ **Fifth's Disease**
- Incubation: 4-14 days.
 - Communicable: until the rash appears.
 - Children in the rash stage can attend school.
- 31 ☐ **Clinical findings**

- Low grade fever
- Rash in 3 stages:
 - 1) slapped cheek
 - 2) lacy rash to arms, face, thighs and buttocks
 - 3) rash recurrences.

32 ☐ **Cold sore (herpes virus 1)**

- Primary infection: affects ages 1-4.
- Period of communicability: unknown.
- Can be transmitted during primary or recurrent infections.

33 ☐ **Cold Sore Exclusion**

- No exclusion if control of saliva.
- Sores should be covered if possible.

34 ☐ **Clinical findings**

- Most common symptoms in 1-4 yr. olds.
 - Abrupt fever
 - Irritability
 - Lesions and pain to mouth and throat
 - Swollen, reddened and bleeding gums

35 ☐ **Molluscum Contagiosum**

- Highly Contagious.
- Spread by direct or indirect contact.
- 2 month incubation.
- Waxy lesions to face, axillae, trunk and extremities

36 ☐ **Hepatitis A**

- Is highly contagious.
- Non-symptomatic illness common.
- Most contagious 2 weeks before and 1 week after onset of jaundice (yellow).
- Incubation is 15-50 days.

37 ☐ **Clinical findings**

- 1 ■ Pre-yellow phase
 - Tiredness
 - Nausea, Vomiting
 - Loss of appetite
- 2 ■ Yellow phase
 - Dark urine

- Poor weight gain
- Yellow tinged skin and eyes

38 ☐ Diarrhea

- 10% of preventable deaths in the US.
- 500 deaths/year in the US in children.
- Treatment:
 - Restore fluids.
 - Fluids only for 24 hours.
 - BRAT diet.
 - Medication based on the causative organism.
 - Anti-diarrheals not recommended

39 ☐ Pinworms

- It is the most common parasite in children in US.
- Incubation: 1-2 months or longer.
- Communicable: 2-4 weeks.
- Treatment:
 - A single dose of medication, and then a second dose 2 weeks later.
 - Excluded until after first dose of medication.

40 ☐ Ringworm

- Bald patches or areas of broken hairs.
- Red, scaly and crusty circular lesions.
- Exclusion Guidelines:
 - Children should be kept out of school for 2-3 days. They may return to school after treatment has begun.
 - Sores must be covered until completely healed.

41 ☐ Treatment for Ringworm

- Anti-fungal medication or shampoo.
- Family members and pets checked and treated.
- Follow-up visit 2 weeks after treatment.

42 ☐ Lice Clinical Findings

- Itching
- Visible nits and lice.

43 ☐ Treatment

- Lice treatments.
- Combing out the nits.
- Treat the environment.

- Excluded until nit free.

44 ☐ Scabies

- Highly contagious.
- Incubation: 1-2 months after contact.
- Itching begins 3 weeks after infestation.
- Communicable: as long as infected and untreated.

45 ☐ Clinical findings

- Itching, worse at night
- Fitful sleep
- Characteristic lesions

46 ☐ Treatment

- Elimite cream
- Exam/treat all contacts and family members.
- Treat the environment.
- Children can return to school 24 hours after treatment.

47 ☐ Varicella

- Spread by direct contact, droplets and airborne transmission.
- Incubation period--10-21 days.
- Communicable-1-2 days before the rash and until lesions are dry.

48 ☐ Clinical findings

- 1 ■ Prodrome phase
 - Low grade fever
 - Headache
 - Cold S/S
- 2 ■ Rash phase
 - Begins on the trunk.
 - Crops of lesions progress from spots to teardrop vesicles to scabs.
 - Scabs last 5-20 days.

49 ☐ Measles (rubeola)

- Easily transmitted via respiratory secretions.
- Incubation: 10-12 days.
- Communicable: 3-5 days before and 4 days after rash.

50 ☐ Clinical findings

- 1 ■ Prodrome stage
 - Cold S/S
 - Fever
- 2 ■ Rash stage

- Increased fever
- Rash begins behind the ears and on forehead. Progresses downward for 3 days.
- Rash fades day 4.

51 ☐ Mumps

- Incubation: 14-21 days.
- Communicable: 1-7 days before and after onset of swelling.
- Exclusion from school until 9 days after swelling begins.

52 ☐ Clinical findings

- 1 ■ Prodrome stage
 - Fever
 - Headache
 - Neck pain
- 2 ■ Swelling stage
 - Parotid swelling
 - Pain
 - Rash to body
 - Fever

53 ☐ Rubella

- Incubation: 14-21 days.
- Communicable: 7 days before and 5-7 days after the onset of the rash.
- Children should be kept at home for 1 week after the rash appears.

54 ☐ Clinical findings

- Swollen lymph glands
- Rash begins on the face, fades, and then spreads to the rest of the body over 24 hours. Lasts up to 3 days.
- Low fever

55 ☐ Diphtheria

- Lives in respiratory tract.
- Spread through direct contact.
- Incubation: 2-5 days.
- Symptoms:
 - Sore throat
 - Fever/chills
 - Thick gray coating over back of throat

56 ☐ Tetanus

- Lives in dirt and in the feces of animals.

- Enters the body through wounds.
- Incubation: 3 days-3 weeks.
- Symptom: Stiff muscles

57 Pertussis

- Lives in respiratory tract.
- Aerosol transmission.
- Incubation: 5-10 days.
- Symptoms:
 - Coughing
 - Fever
 - Vomiting and Exhaustion

58 Polio

- Lives in throat and intestines.
- Spread by fecal-oral route.
- Incubation: 6-20 days.
- Symptoms:
 - Fever
 - Severe muscle pain/spasm
 - Headache

59 Hib

- Enters the body through nose and throat.
- Incubation: unknown.
- Symptoms:
 - Fever
 - Severe Headache
 - Severe Sore throat

60 Smallpox

- Does not infect people anymore.

61 TUBERCULOSIS

- Infecting agent--mycobacterium tuberculosis
- More than 25,000 people in US get TB every year.
- Spread by inhalation of infected respiratory secretions.

62

- Exposure--recent contact with infected person.
- Infection--positive skin test without physical findings.
- Disease--person with infection and symptoms.
- Communicable only short time if take medication.
- Children usually not contagious.

63 ☐

- Incubation period from infection to positive skin test--2-12 weeks.
- High risk--6 months to 2 years.
- Highest risk--infants and post-pubertal adolescents.
- Highest attack rate:
 - minorities from high risk countries
 - lower socioeconomic groups
 - the homeless
 - inmates
 - the malnourished
 - those with chronic diseases

64 ☐ **Symptoms of TB**

- Not feeling well
- Cough
 - minimally productive at first
 - more productive as progresses
- Low-grade fever
- Generalized tiredness
- Decreased appetite
- Subsequent weight loss

65 ☐ **Take home message**

- Most of these diseases will happen in your room.
- Good hand washing will stop the spread of these diseases, even when in very close proximity.