Measles (also called rubeola, red measles, or hard measles) is a serious illness that may be prevented by vaccination. Measles is a rare disease in Minnesota. Currently, measles most often occurs in susceptible persons (those who have never had measles or measles vaccine) who are traveling into and out of the United States. Once measles cases occur, there may be spread to persons or groups of people who have not been vaccinated.

**CAUSE**  
Measles virus.

**SYMPTOMS**  
The first symptoms seem like the beginning of a cold with a high fever, watery eyes, runny nose, and cough. A red blotchy rash appears on the third to seventh day, usually beginning on the face (hairline), spreading down the trunk and down the arms and legs. The fever may still be present after the rash starts. The rash usually lasts 4 to 7 days. Measles is sometimes complicated by diarrhea, ear infection or pneumonia. About one child in every 1000 who gets measles will develop encephalitis (inflammation of the brain). Encephalitis can lead to seizures, deafness, or mental retardation.

**SPREAD**  
When a person with measles coughs, sneezes, or breathes out tiny droplets with measles virus into the air and another person breathes them in. The virus can sometimes float in the air and infect others for approximately two hours after a person with measles leaves a room. Also by handling or touching contaminated objects and then touching your eyes, nose, and/or mouth.

**INCUBATION**  
It takes from 8 to 12 days from the time a person is exposed until cold-like symptoms begin. The time from exposure to when the rash starts is usually 14 days, but may be up to 18 days.

**CONTAGIOUS PERIOD**  
From 4 days before to 4 days after the rash starts.

**EXCLUSION**  
Childcare and School: Until 4 days after the rash appears. A child with measles should not attend any activities during this time period.

Exclude unvaccinated children and staff, who are not vaccinated within 72 hours of exposure, for at least 2 weeks after the onset of rash in the last person who developed measles.

**DIAGNOSIS**  
A rash may occur with many viral illnesses. If measles is suspected, a blood test for measles antibody should be done 3 to 5 days after rash begins.

Persons who have been exposed to measles should contact their healthcare provider if they develop cold-like symptoms with a fever and/or rash. They should NOT go to any healthcare facility without calling first. The child will be kept separate from others to prevent further spread.

**TREATMENT**  
Recommend parents/guardians call their healthcare provider.

June 2008
MEASLES

PREVENTION/CONTROL

- Minnesota state law requires that all children 15 months of age or older enrolled in a childcare setting or school, be vaccinated against measles on or after the first birthday or have a legal exemption. Measles vaccine is usually combined with mumps and rubella vaccine (MMR) and given at 12-15 months of age. Two doses or a legal exemption are required for kindergarten and seventh grade enrollment.

- Unvaccinated people who have been exposed to measles should call their healthcare provider or local public health clinic as soon as possible to be vaccinated.

If measles vaccine is given within 72 hours of exposure, it may provide some protection. Encourage parents/guardians to notify the childcare provider or school when their child is vaccinated so their records can be updated.

Immune globulin (IG) if given within 6 days of exposure can prevent or make the symptoms of measles milder. This should be strongly considered for contacts younger than one year of age, pregnant women who have never had measles or measles vaccine, or persons with a weakened immune system.

- Recommend staff stay home if they develop symptoms of measles. Encourage parents/guardians keep their child home if they develop symptoms of measles.

- Teach children and staff not to touch their eyes, nose, or mouth.

- Cover your nose and mouth with a tissue when coughing or sneezing, or cough/sneeze into your sleeve. Dispose of used tissues.

- Clean and sanitize mouthed toys, objects, and surfaces at least daily and when soiled.

- Wash hands thoroughly with soap and warm running water after touching secretions from the nose or mouth. Thorough handwashing is the best way to prevent the spread of communicable diseases.

FOR MORE INFORMATION

Kentucky Department for Public Health Frankfort, KY http://chfs.ky.gov/dph/
Kentucky Regional Poison Center Louisville, KY EMERGENCY: 1-800-222-1222
Lake Cumberland District Health Department Somerset KY www.lcdhd.org (606) 678-4761
The Centers for Disease Control and Prevention (CDC) Atlanta, GA Toll free: 1-800-311-3435 www.cdc.gov