



COMMUNICABLE DISEASE NEWSLETTER

Our Mission: Our commitment is to protect and promote the public's health and well-being.

Saginaw County Department of Public Health

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CHICKEN POX

What is chicken pox?

Chicken pox is an infectious disease caused by the varicella zoster virus. This virus is a member of the herpes virus family and enters the body through the respiratory tract. The varicella zoster virus spreads through the air when an infected person coughs or sneezes or through contact with the fluid from the chicken pox blisters.

How long is it from when a person is exposed until they get the disease?

The period of time from which a person is exposed to chicken pox until they develop a rash is 14-16 days with a range of 10-21 days.

What are the symptoms?

There may be 1-2 days of fever and feeling tired and sick before the rash onset, but in children, the rash is often the first sign of the disease. The rash usually comes out in "crops" of multiple, small red bumps that look like insect bites. They quickly develop fluid-filled blisters which break open and crust. The rash usually appears first on the trunk and upper body and then spreads to the arms and legs. Blisters can also occur in the mouth, throat, and genital area. Groups of blisters can appear for several days with all stages of the rash being present at the same time.

How long is chicken pox contagious?

The contagious period for chicken pox begins about 2 days before the rash appears and lasts until all the blisters are crusted and dried, usually about 7 days. Persons with chicken pox should be excluded from school until all the blisters are dried.

Complications of chickenpox include bacterial infections of the skin and viral pneumonia. Complications occur more often in persons older than 15 year of age and infants younger than 1 year of age. Others at risk of complications are persons with weak immune systems and pregnant women. These groups should avoid contact with someone with chickenpox and contact their health care provider if exposed.

How is chickenpox treated?

Since chickenpox is caused by a virus, antibiotics would not be useful in treating this disease. Treatment of chicken pox involves ways to help reduce the itchiness and lowering the risk of complications.

-Apply wet compresses or provide cool, lukewarm water for a bath every 3-4 hours during the first couple of days. Colloidal oatmeal (e.g. Aveeno) which can be purchased over the counter can be added to the bath to relieve itching. Patting the body dry instead of rubbing can also reduce itching.

-When sores are found in the mouth, avoid eating or drinking highly acidic or salty foods. Soft, cold, or bland foods may be better tolerated.

-Give medication e.g. acetaminophen (Tylenol) to help relieve pain and fever. Never use aspirin to reduce pain or fever in children with chickenpox. Using aspirin in such cases has been linked with a serious disease called Reye's Syndrome which can lead to liver failure and death.

- Clean and trim fingernails and encourage the person not to scratch their skin.

Can't chickenpox be prevented with a shot now?

Since 1995, varicella vaccine has been given to children older than 12 months. The vaccine is 70-85% effective in preventing mild infections and more than 95% effective in preventing moderate or severe disease. People who do develop chicken pox after vaccination have much milder symptoms and fewer blisters. This leads to a faster recovery and fewer complications. Varicella vaccine is recommended for all children without contraindications at 12-18 months of age. One dose of vaccine is recommended for all children before the 13th birthday. Persons 13 years or older should receive 2 doses of the vaccine separated by at least 4 weeks to achieve full immunity. People with a history of having the chickenpox disease are considered immune to the disease. One percent of those receiving the vaccine have developed breakthrough or a milder case of the chickenpox.

Since chickenpox is becoming increasingly rare, this disease has now been added to those diseases that are individually reported when diagnosed.

A person usually has chicken pox only once in their lifetime. However, once in the body, the virus can be dormant and can cause a different type of skin condition later in life called shingles or herpes zoster.

References:

1. Control of Communicable Diseases Manual 18th edition 2004. David L. Heymann, MD Editor. pp. 94-99.
2. Epidemiology and Prevention Vaccine Preventable Diseases 9th Edition, Centers for Disease Control and Prevention, January, 2006. pp. 171-191.
3. <http://www.cdc.gov>

SCABIES

Scabies is a contagious skin disease caused by a very small mite. Infestation is common and affects people of all races and social classes. Scabies spread by direct, prolonged, skin-to-skin contact with a person already infested with scabies. It is easily spread to sexual partners and

household members. It also may occur by sharing clothing, towels and bedding. The mite cannot survive more than 48-72 hours away from the human body, however it can survive up to a month when living on a person.

Symptoms

For a person who has never had scabies, it could take 4-6 weeks before symptoms appear. People who have been previously infested develop symptoms 1-4 days after re-exposure.

Symptoms of scabies include:

- Pimple-like irritations, burrows or rash of the skin, especially the webbing between the fingers, the folds on the wrist, the elbow, or the knee, the penis, the breast, or the shoulder blades.
- Intense itching, especially at night and over most of the body.
- Sores on the body caused by scratching.

Diagnosis

Diagnosis is most often made by examination of the rash. Confirmation may be made by scraping the skin to look for mites, eggs, or mite fecal matter.

Treatment

Several prescription lotions and creams are available to treat scabies. The lotions are applied over the entire body and may require a second treatment 7-10 days later. All affected and asymptomatic members of a household must be treated at the same time to avoid reinfestation. It is important to know that itching may persist for 1-2 weeks after treatment and should not be regarded as a sign of drug failure or reinfestation. No new rash should appear 24-48 hours after effective treatment.

Prevention

Avoid contact with known infested persons.

References:

1. www.cdc.gov
2. Control of Communicable Diseases Manual 18th Edition 2004. David Heymann, MD, Editor. Pages 473-476

MUMPS

Mumps virus is a paramyxovirus in the same group as parainfluenza and Newcastle disease virus. Parainfluenza and Newcastle disease viruses produce antibodies that cross-react with mumps virus. The virus has a single-stranded RNA genome.

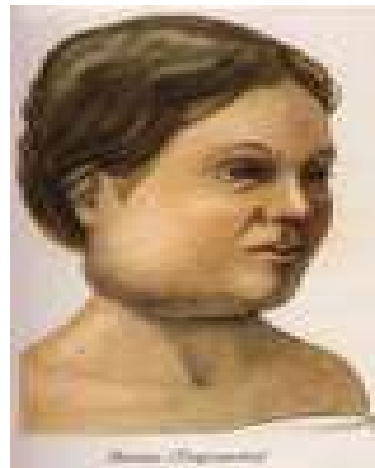
The virus is acquired by respiratory droplets. It replicates in the nasopharynx and regional lymph nodes. After 12-25 days a viremia occurs, which lasts from 3 to 5 days. During the viremia, the virus spreads to multiple tissues, including the meninges, and glands such as the salivary, pancreas, testes, and ovaries. Inflammation in infected tissues leads to characteristic symptoms of parotitis and aseptic meningitis.

The incubation period of mumps is 14 – 18 days, and may range up to 25 days. The prodromal symptoms are nonspecific, and include myalgia, anorexia, malaise, headache, and low-grade fever. Parotitis is the most common manifestation and occurs in 30-40% of infected persons. Parotitis may be unilateral or bilateral, and any combination of single or multiple salivary glands may be affected. Parotitis tends to occur within the first 2 days and may be first noted as earache and tenderness on palpation of the angle of the jaw. Symptoms tend to decrease after one week and usually resolve after 10 days. As many as 20% of mumps infections are asymptomatic. An additional 40 – 50% may have only nonspecific or primarily respiratory symptoms.

Mumps virus can be isolated from clinical specimens. The clinical samples acceptable for mumps virus isolation are throat or nasopharyngeal swabs, urine, buccal cavity fluid, and serology. Fluid from the buccal cavity may yield the best viral sample, particularly when the parotid gland area just below the ear is massaged for 30 seconds prior to collection of secretions. Virus may be isolated from the buccal mucosa or

urine from 7 days before until 9 days after onset of parotitis. **Collection of viral samples from persons suspected of having mumps is strongly recommended.**

At least one dose of mumps-containing vaccine is routinely recommended for all children and for all persons born during or after 1957. The first dose of mumps-containing vaccine should be given on or after the first birthday. Mumps-containing vaccine given before 12 months of age should not be counted as part of the series, and should be re-administered when the child is at least 12 months of age. The second dose of mumps-containing vaccine should be given routinely at age 4 – 6 years, before a child enters kindergarten or first grade. Adults born in 1957 or later who do not have a medical contraindication should receive at least one dose of mumps-containing vaccine unless they have documentation of vaccination or other acceptable evidence of immunity to mumps.



Reference:

2. Epidemiology and Prevention Vaccine Preventable Diseases 9th Edition, Centers for Disease Control and Prevention, January, 2006. pp. 171-191.

**COMMUNICABLE DISEASE
REPORTED FOR SAGINAW
COUNTY
1/1/2006 – 3/31/2006**

Disease	No. Reported
AIDS AGGREGATE	6
ANIMAL BITE	2
CAMPYLOBACTER	1
CHLAMYDIA (GENITAL)	264
CRYPTOCOCCOSIS	1
FLU-LIKE DISEASE	9201
GIARDIASIS	1
GONORRHEA	95
HIV	3
HEPATITIS B CHRONIC	2
HEPATITIS C ACUTE	1
HEPATITIS C CHRONIC	66
HISTOPLASMOSIS	1
KAWASAKI	1
LEGIONELLOSIS	1
MENINGITIS-ASEPTIC	7
MUMPS	1
PNEUMONIAE INV	1
SALMONELLOSIS	2
SHIGELLOSIS	1
TOXIC SHOCK	1
VARICELLA (chickenpox)	1

This newsletter is provided to all Saginaw
County
healthcare providers, hospitals, schools, local
colleges, universities, urgent care facilities,
and local media.

If you know anyone who would
like a copy of this newsletter, or has a topic of
interest, contact the Communicable Disease
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Please visit our website at
www.saginawpublichealth.org where
our communicable disease pamphlets
are available.