Varicella

http://www.cdc.gov/chickenpox/hcp/clinical-overview.html

Clinical Features
The incubation period for varicella is 14 to 16 days after exposure to a varicella or a herpes zoster rash, with a range of 10 to 21 days. A mild prodrome of fever and malaise may occur 1 to 2 days before rash onset, particularly in adults. In children, the rash is often the first sign of disease.

Varicella in Unvaccinated Persons
The rash is generalized and pruritic (itchy). It progresses rapidly from macules to papules to vesicular lesions before crusting. The rash usually appears first on the head, chest, and back then spreads to the rest of the body. The lesions are usually most concentrated on the chest and back.

In healthy children, varicella is generally mild, with an itchy rash, malaise, and temperature up to 102°F for 2 to 3 days. Adults are at risk for more severe disease and have a higher incidence of complications. Recovery from primary varicella infection usually provides immunity for life. In otherwise healthy people, a second occurrence of varicella is uncommon and usually occurs in people who are immunocompromised. As with other viral infections, re-exposure to natural (wild-type) varicella may lead to re-infection that boosts antibody titers without causing illness or detectable viremia.

Complications
The most common complications from varicella are:
- bacterial infections of the skin and soft tissues in children
- pneumonia in adults
Severe complications include septicemia, toxic shock syndrome, necrotizing fasciitis, osteomyelitis, bacterial pneumonia, and septic arthritis. Other complications caused by varicella include cerebellar ataxia, encephalitis, viral pneumonia, and hemorrhagic conditions.

Transmissions
Varicella is highly contagious. The virus spreads in the air when an infected person coughs or sneezes. It can also be spread by touching or breathing in aerosolized virus from varicella lesions. A person with varicella is contagious from 1-2 days before rash onset until the lesions have crusted. It takes from 10-21 days after exposure to the virus for someone to develop varicella. Based on studies of transmission among household members, about 90% of susceptible close contacts will get varicella after exposure to persons with disease.

The Chelan-Douglas Health District received a report of a middle school student with varicella (chickenpox).

Varicella vaccine is not required for grades 7-12 and some high school students remain unprotected against varicella infection.

Characteristic pancoerule varicella lesions in unvaccinated person.
Varicella cont.

Laboratory Testing

Varicella used to be very common in the United States before varicella vaccine became available. Health care providers could readily diagnose varicella by doing a clinical assessment. As a result, testing specimens and getting laboratory confirmation of varicella-zoster virus (VZV) were not usually needed. However, clinical diagnosis is becoming more challenging because fewer people get varicella. Also, varicella in vaccinated people is often mild and atypical in presentation (see Clinical Features). Therefore, laboratory confirmation of varicella is becoming increasingly important in routine clinical practice.

Laboratory testing is also recommended to:
- confirm varicella as the cause of outbreaks
- establish varicella as a cause of death
- determine susceptibility to varicella

Finally, specialized laboratory testing can be used to determine if suspected vaccine-related adverse events were caused by vaccine-strain VZV.

For more information, see Collecting Specimens for Varicella Zoster Virus (Chickenpox & Shingles) Testing. Also see Varicella and Breakthrough Varicella: To Test or Not to Test.

Related Pages
- Conducting Varicella Surveillance
- Chickenpox Outbreaks
- Slide set: Overview of VZV Disease & Vaccination for Healthcare Professionals [57 pages]
- Slide set: Varicella and Breakthrough Varicella: To Test or Not to Test [2.07MB, 14 slides]

MS PowerPoint® file available upon email request

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MMWR Recommendations and Reports

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Recommendations for the Laboratory-Based Detection of Chlamydia trachomatis and Neisseria gonorrhoeae — 2014
John R. Papp, PhD, Julius Schachter, PhD, Charlotte A. Gaydos, DrPH, et al.

This report updates CDC’s 2002 recommendations regarding screening tests to detect Chlamydia trachomatis and Neisseria gonorrhoeae infections and provides new recommendations regarding optimal specimen types, the use of tests to detect rectal and oropharyngeal C. trachomatis and N. gonorrhoeae infections, and circumstances when supplemental testing is indicated. These recommendations are intended for use by clinical laboratory directors, laboratory staff, clinicians, and disease control personnel who must choose among the multiple available tests, establish standard operating procedures for collecting and processing specimens, interpret test results for laboratory reporting, and counsel and treat patients.