

Vaccine Education Module: Vaccine-Preventable Diseases

Updated: March 2012



Diseases Caused by Bacteria

- Diphtheria
- Haemophilus influenzae* type b
- Meningococcal disease
- Pertussis
- Pneumococcal disease
- Tetanus



Diphtheria

This child has diphtheria and has developed a pseudo-membrane, a thick gray coating over the back of his throat.

Photo courtesy of CDC



Haemophilus influenzae type b

This child has a swollen face due to Hib infection.
Courtesy Children's Immunization Project, St. Paul, Minn.



Meningococcal Disease

This 4-month-old has gangrene due to infection with meningococcus.

Photo courtesy of CDC



Pertussis

Child with broken blood vessels in eyes and bruising on face due to severe coughing caused by pertussis.

Courtesy Thomas Schlenker, M.D., M.P.H., Chief Medical Officer,
Children's Hospital of Wisconsin

Pneumococcal Disease

- Caused by the bacterium *Streptococcus pneumoniae*
- Can infect different parts of the body leading to:
 - Pneumonia
 - Bacteremia (blood infection)
 - Meningitis
 - Ear infection



Tetanus

This child was experiencing painful muscle spasms due to infection with tetanus.

Courtesy CDC

Diseases Caused by Viruses

- Hepatitis A
- Hepatitis B
- Shingles
- Human papillomavirus (HPV)
- Influenza
- Measles
- Mumps
- Rotavirus
- Chickenpox
- Polio



Hepatitis A

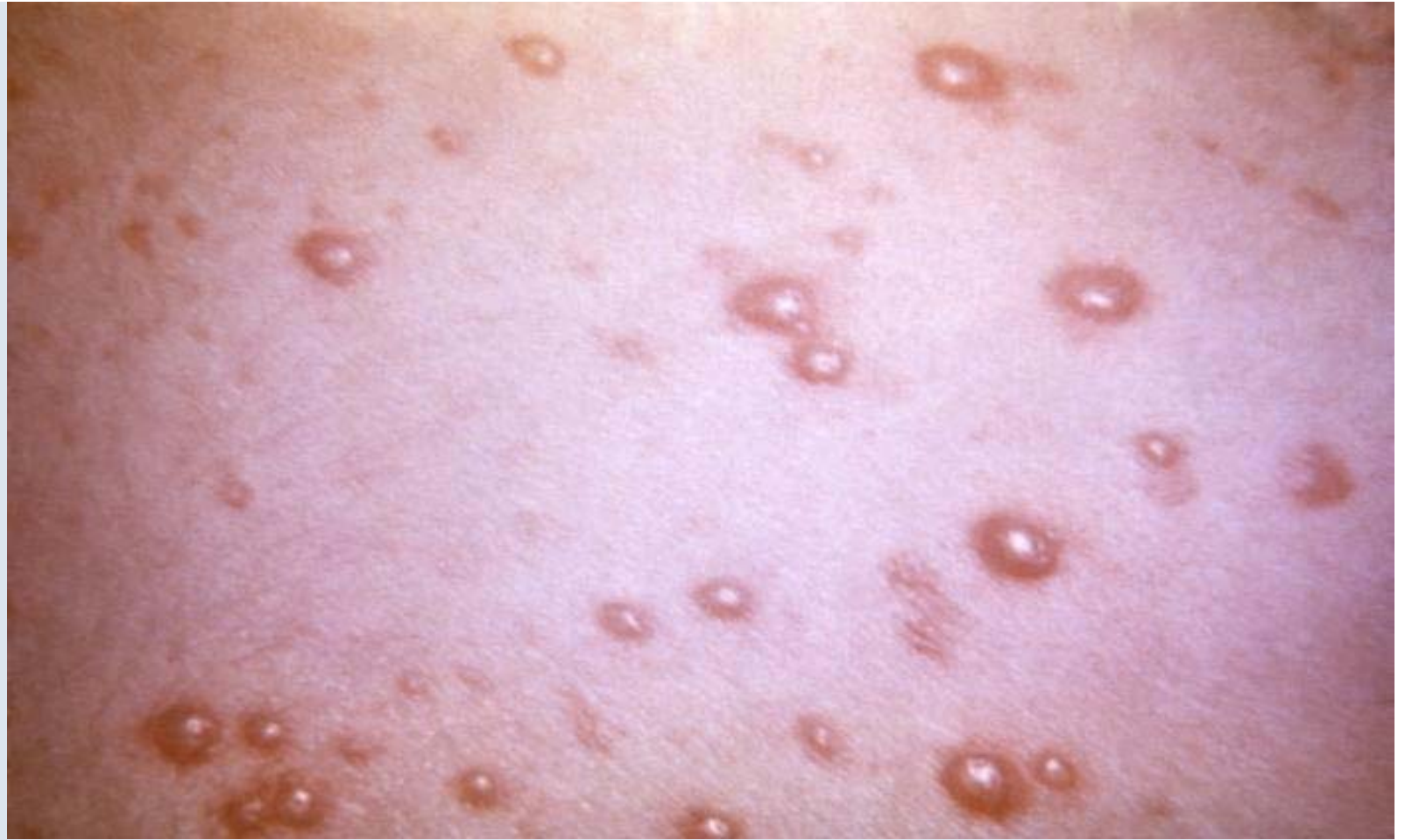
This man developed jaundice as a result of hepatitis A infection.
Courtesy CDC



Hepatitis B

This woman has liver cancer caused by hepatitis B.

Courtesy CDC



Shingles

This woman has a skin rash from shingles.

Courtesy CDC

Human Papillomavirus (HPV)

- HPV is the most common sexually transmitted disease
- Most people who are infected do not have any symptoms
- Pap tests are performed on females to evaluate cells from the cervix under a microscope
 - Cells are examined for abnormal changes that if left untreated may develop into cervical cancer.



Influenza

This photo shows how influenza germs spread through the air when someone coughs.

Courtesy CDC



Measles

Head and shoulders of a boy with measles.
Courtesy CDC



Mumps

•This child is very swollen under the jaw and in the cheeks due to mumps.

Courtesy CDC



Rubella

This child was born with cataracts caused by a rubella infection his mother transmitted to him before birth.

Courtesy CDC

Rotavirus

- Causes severe vomiting and diarrhea that can lead to dehydration.
- Dehydration can lead to death particularly in countries where medical care is not readily accessible.
- Before there was a vaccine virtually all children had this infection by the age of five.



Chickenpox

Patient with chickenpox infection

Courtesy CDC



Chickenpox

One of the chickenpox lesions became infected leading to complications.

Courtesy CDC



Polio

This young man suffers from upper extremity paralysis due to infection with poliovirus.

Courtesy CDC