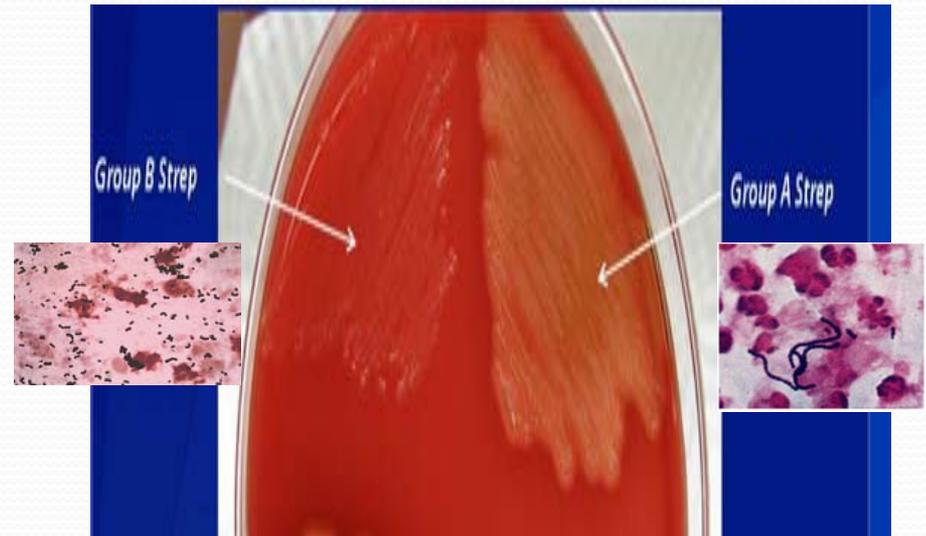


Streptococcal disease

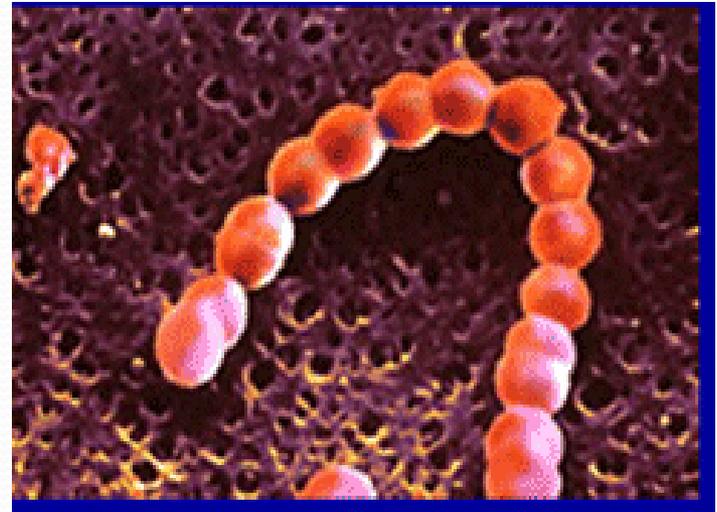
What is streptococcal disease?

- Streptococcal disease refers to all invasive disease caused by bacteria, **Groups A & B Streptococci**.



What is group A Streptococcus (GAS)?

- **Group A streptococcus** are bacteria commonly found in the throat and on the skin.
- The vast majority of GAS infections are relatively mild illnesses such as strep throat and impetigo (sore throat, pain on swallowing, fever).
- However, these bacteria can cause more severe diseases.



What is invasive group A streptococcal disease?

- **Invasive GAS disease** is a severe and sometimes life-threatening infection in which the bacteria have invaded parts of the body, such as the blood, deep muscle and fat tissue or the lungs.
- Two of the most severe invasive GAS disease are called **necrotizing fasciitis** - infection of muscle and fat tissue & **streptococcal toxic shock syndrome** - a rapidly progressing infection causing low blood pressure/shock and injury to organs such as the kidneys, liver and lung.

How is Group A *Streptococcus* (GAS) transmitted?

- These bacteria are spread through direct contact with mucus from the nose or throat of persons who are infected or through contact with infected wounds or sores on the skin.

Who is most at risk of getting invasive group A streptococcal disease?

- People with chronic illnesses like cancer, diabetes and chronic heart or lung disease and those who use medications such as steroids have a higher risk.
- Persons with skin lesions such as cuts, chicken pox, surgical wounds.
- The elderly and adults with a history of alcohol abuse or injection drug use.



What are the symptoms of the most severe invasive GAS diseases?

Necrotizing fasciitis

- Fever
- Severe pain and swelling
- Redness at the wound site

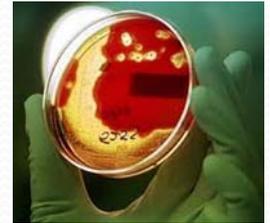


Streptococcal toxic shock syndrome

- Fever
- Dizziness
- Confusion
- Low blood pressure
- Rash
- Abdominal pain



How GAS disease is diagnosed?



GAS disease is usually diagnosed by a throat culture

- Swab in the throat or cuts
- Blood tests



How invasive GAS disease is treated?

- GAS bacteria can be treated with antibiotics.
- Penicillin is the drug of choice for both mild and severe disease.

How can group A streptococcal infections be prevented?

- The spread of all types of GAS infection can be reduced by good hand washing especially after coughing and sneezing and before preparing foods or eating.
- All wounds should be kept clean.
- Persons with strep throat should stay home from work, school or day care until 24 hours after taking an antibiotic to prevent GAS spread.

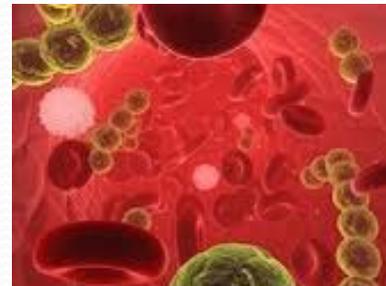
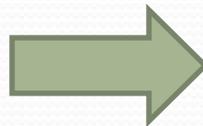
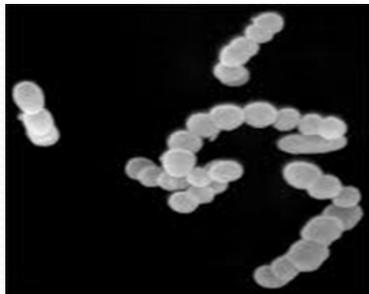


What is group B Streptococcus (GBS)?

- **Group B Streptococcus (GBS)** are common bacteria which are often found in the vagina, rectum, or urinary bladder of women.
- GBS can cause serious illness in newborn babies, pregnant women, the elderly, and people with weakened immune systems.

What is invasive group B streptococcal disease?

- Invasive GBS disease is a severe and sometimes life-threatening infection in which the bacteria have invaded parts of the body such as the blood, deep muscle and fat tissue or the lungs.



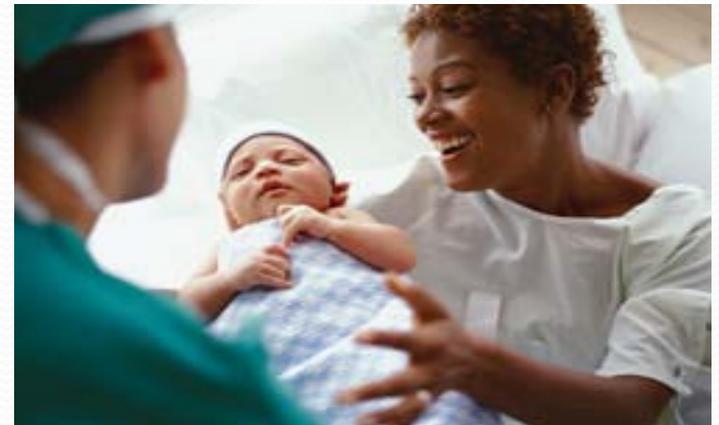
How is GBS transmitted?

- The bacteria is commonly found in the gastrointestinal, urinary, and reproductive tracts and is transmitted from person to person.
- Infected mother to her baby during vaginal childbirth
- Many people carry the GBS bacteria on their bodies but do not become ill.



Who is most susceptible to invasive group B streptococcal disease?

- Newborns
- The elderly
- Persons with chronic disease, such as diabetes, liver failure, and history of stroke or cancer or those who have experienced recent trauma



What are the symptoms of invasive GBS diseases?

***Newborns-** The symptoms of newborn occur during the first week of life (early-onset disease), or occur during the first week through 3 months of life (late-onset disease).

- Fever
- Difficulty feeding
- Irritability or lethargy
- Difficulty breathing
- Blue-ish color to skin



What serious problems result from invasive GBS diseases?

Newborns-

- Sepsis -infection of the blood
- Pneumonia - infection in the lungs
- Meningitis - infection of the fluid and lining around the brain

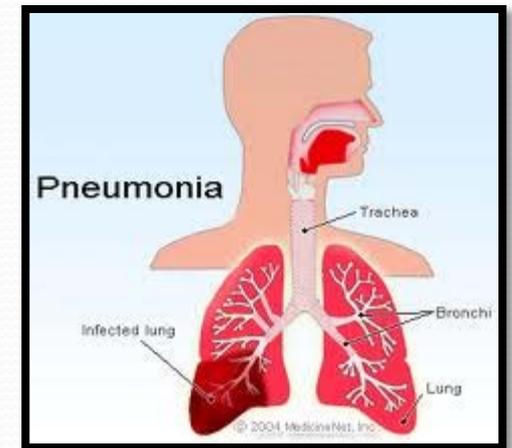


What serious problems result from invasive GBS diseases?

Adults-



- Bloodstream infections
- Pneumonia - infection in the lungs
- Skin and soft-tissue infections
- Bone and joint infections
- In rare adult cases group B strep can cause meningitis

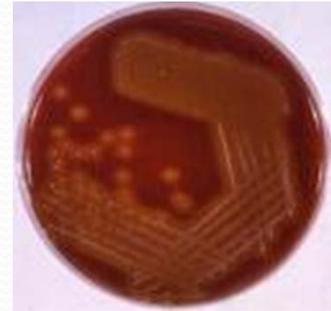


How is GBS disease diagnosed?

- A sample of sterile body fluids such as blood or spinal fluid
- Urine test (adults)

How is GBS disease be treated?

- GBS infections in both newborns and adults are usually treated with antibiotics.





How can GBS disease be prevented?

Newborn prevention

- Pregnant women should be screened for GBS between 35 – 37 weeks of each pregnancy. If found to be a carrier, preventive antibiotic therapy can be administered during delivery to reduce bacterial transmission

Adult prevention

- Good personal hygiene.
- Wash hands regularly especially after coughing or sneezing, and before and after caring for a sick person.

