4) Group D Streptococci:

- Is composed of the Enterococci (E. faecalis and E. faecium) and the non-Enterococci (S. bovis and S. equinus).
- Enterococci grow in 40% bile and 6.5% NaCl, non-Enterococci only grow in bile.
- Cause biliary tract infections, urinary tract infection, sub-acute endocarditis and septicemia.
- S. bovis infections are associated with colon cancer.

5) S. Pneumoniae

- Cause pneumonia and meningitis in adults and otitis media in children.
- Tests for it include Quellung and Optochin sensitivity test.
- Resistant strains are emerging.
- There is a vaccine against some strains.

Diseases:

1) Scarlet Fever: Characterized by fever and a rash that starts from the neck and trunk to the extremities, and spares the face.
2) Toxic shock syndrome: Diffuse erythematous rash, desquamation, septic shock, fever.
3) Rheumatic fever: Fever, myocarditis, arthritis, chorea (uncontrolled movements of extremities, subcutaneous nodules and a rash). Antibodies formed against streptococcal infections damage heart tissue—especially mitral valve and cause chest pain and other CVS symptoms. Prophylactic antibiotics are used to prevent bacterial infections from leading to heart damage.

All notes were cross checked.