Nosocomial infections

Commonest nosocomial pathogens

Common commensals that cause infection in susceptible patients

Risk factors

Diagnosis

Nosocomial infections

Patient
- Severity of illness
- Underlying diseases
- Nutritional state
- Immunosuppression
- Open wounds
- Invasive devices
- Multiple procedures
- Prolonged stay
- Ventilation
- Multiple or prolonged antibiotics

Environment
- Changes in procedures or protocols
- Multiple changes in staff; new staff
- Poor aseptic practice — poor hand washing
- Patient to patient. Busy, crowded unit, staff shortages

The Organism
- Resistance
- Resilience in terms of survival
- Formation of slime or ability to adhere
- Pathogenicity
- Prevalence

Site
- Skin: Staph. epidermidis, streptococci, corynebacterium (diphtheroids), candida
- Throat: Strep. viridans, diphtheroids
- Mouth: Strep viridans, Moraxella catarrhalis, actinomyces, spirochaetes
- Respiratory tract: Strep. viridans, Moraxella, diphtheroids, micrococci
- Vagina: Lactobacilli, diphtheroids, streptococci, yeast
- Intestines: Bacteroides, anaerobic streptococci, Clostridium perfringens, Escherichia coli, Klebsiella, proteus, enterococci

Diagnosis of infection usually requires the combination of both clinical findings and the results of diagnostic tests.
Clinical diagnosis of infection from direct observation at surgery, endoscopy or other diagnostic procedure is an acceptable criterion for an infection.
It must be hospital acquired. There must be no evidence that the infection was present or incubating at the time of hospital admission. Infection acquired in hospital, but only evident after hospital discharge also fulfills the criteria.
Usually no specific time during or after hospitalization is given to determine whether an infection is nosocomial or community-acquired. Each infection is examined for evidence that links it to hospitalization (this is a matter of controversy).