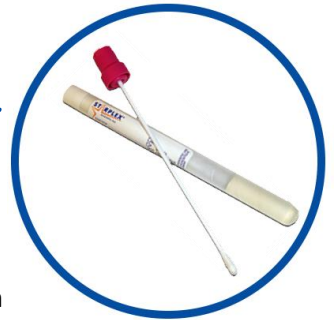


This [Fact Sheet](#) is intended as a guide only and does not equate to expert opinion. Interpretation of results should always be taken in context with the patient's current condition and clinical review.

Wound swab MC&S – *interpretation of results*



- Wound swab for microscopy, culture and susceptibility (MC&S) testing is used to assist in the detection a wound infection.
- Normal skin and therefore skin wounds, have a mixture of different bacteria which are often harmless and do not require treatment, this is called colonisation.
- It is important to think carefully about the likely significance of the results of cultures from wound swabs to avoid over-treating patients with antibiotics; you do not have to treat everything that is cultured.

Microscopy



- If there is a high *white cell*, *polymorph* or *pus cell* count, ++ or +++, this suggests a wound infection may be present.
- If ++ or +++ Gram negative or Gram positive bacteria are seen on microscopy, there is more likely to be a **true infection**.

Culture



- If there is a colony count of $>10^6/L$, ++ or +++ of a bacteria, this is more likely to be a **true infection**.
- Growth of more than one bacteria species suggests possible **contamination**.
- Common bacteria likely to cause wound infections include: *Staphylococcus aureus*, *Streptococcus pyogenes* and *Clostridium perfringens*.

Susceptibility



- If the patient is receiving an antibiotic to which the bacteria are reported as *resistant (R)* or *intermediate (I)*, this may need to be changed to treatment to which the bacteria are reported as *susceptible (S)*.
- If there is more than one antibiotic to which the bacteria are reported as *susceptible (S)*, the patient should be prescribed the one with the *narrowest spectrum*.

Note:

Good wound and skin care is critical: the decision to treat a wound infection with antibiotics should be made on clinical grounds, not based on the results of a wound swab. Antibiotic treatment may be needed for an infection which is spreading into surrounding skin (suggested by redness, heat, swelling) or where systemic symptoms are present, *e.g.* fever.

Good blood supply is required for wound healing: referral to a vascular surgeon may need to be considered for non-healing wounds.