

Burn wound infection:

A diagnosis of burn wound infection will include the following:

Presence of one the following criteria:

- Obvious signs of purulence
- Burn wound cellulitis – defined by a greater than 2 cm area of redness surrounding the burn wound.

Or the presence of at least 2 of the following:

1. Presence of one or more of the following:
 - Fever (without other clear identified cause)
 - Elevated WBC above normal, or a WBC up trending significantly from the previous lab (e.g., a jump from 6000 to 9000)
 - Increased pain and swelling at the site.
 - Abnormal drainage, or odor Increasing loss of established graft (ghosting or pock marking)
2. Organism(s) identified from blood by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).

Treatment when a diagnosis is made should include:

- When obvious purulence or cellulitis is present:
 - IV antibiotics – if a recent culture is present, recommended treatment with an antibiotic effective against previous cultures until a final diagnostic culture returns with sensitivity unless there are obvious signs of sepsis in addition to the wound infection.
 - Possible change in the topical wound care to address the possible bacteria present more appropriately.
- When 2 or more of the other signs/symptoms are present (fever, elevated WBC, etc.)
 - Recommend starting with a focused change in wound care and topical wound care treatment to address the known bacteria in the wound.
 - With no improvement over 24 hours, would recommend adding an appropriate IV antibiotic.
- When only 1 of the signs/symptoms are present:
 - Focused change in wound care and topical wound care treatment.
- A burn wound culture without any of the above should not be treated with antibiotics.

Fever work-up in Burn patients:

Should include a diagnostic burn wound culture in an area of the burn wound at most risk for infection (eg. back, posterior thighs, etc) at the same time as blood, urine, sputum, etc.

All burn patients should get an **admission burn wound culture**. This information is to be used only in the event of a later development of clinical signs of a wound infection and should not be treated solely based on growth of organisms in the absence of clinical signs of infection.

Contact precautions:

- All burn patients (ICU and step down) are under contact precautions, regardless of TBSA % burn, until wounds are healed.
- All burn patient families/visitors need to wear PPE while in the room, follow hand hygiene rules, etc.
- When the burn patients are out of their rooms, they need to be wearing a gown and gloves if out of bed or on a stretcher.