

## Definitions of Bacterial Burden in Chronic Wounds

Term	Clinical Interpretation	Clinical Intervention
<b>Contaminated</b>	<ul style="list-style-type: none"> <li>• Bacteria are present on the wound surface, but not proliferating</li> <li>• Bacteria NOT causing harm to the host</li> </ul>	Monitoring and risk reduction
<b>Colonized</b>	<ul style="list-style-type: none"> <li>• Bacteria are present on the wound surface, proliferating and starting to form colonies</li> <li>• Bacteria are NOT causing harm to the host</li> </ul>	Monitoring and risk reduction
<b>Critical Colonization (a.k.a. Local Infection)</b>	<ul style="list-style-type: none"> <li>• Bacteria are present on the wound surface and in the wound bed, and are proliferating, resulting in delayed wound healing</li> <li>• <b>Subtle signs of infection</b> may be present, including:                             <ul style="list-style-type: none"> <li>○ Friable, bright red granulation tissue</li> <li>○ Increased or altered exudate</li> <li>○ Increased or new odor</li> <li>○ Increased pain</li> <li>○ Localized edema</li> </ul> </li> </ul>	Intervention required, i.e.: <ul style="list-style-type: none"> <li>• Topical antimicrobials</li> <li>• Effective debridement</li> </ul>
<b>Spreading Infection</b>	<ul style="list-style-type: none"> <li>• Bacteria are present on the wound surface and in the wound bed <b>AND</b> in the surrounding tissues. Bacteria are proliferating, delaying wound healing</li> <li>• In addition to the subtle signs above, the following <b>classic signs and symptoms of infection</b> may be present:                             <ul style="list-style-type: none"> <li>○ Increased periwound temperature</li> <li>○ Wound breakdown with satellite lesions</li> <li>○ Induration and redness extending beyond the wound borders</li> <li>○ Lymphangitis</li> <li>○ General malaise</li> </ul> </li> </ul>	Intervention required, i.e.: <ul style="list-style-type: none"> <li>• Topical antimicrobials</li> <li>• Effective debridement</li> <li>• Systemic antibiotics</li> </ul>
<b>Systemic Infection</b>	<ul style="list-style-type: none"> <li>• Bacteria are present on the wound surface, in the wound bed, in the surrounding tissues, and have spread systemically. Bacteria are proliferating, delaying wound healing</li> <li>• In addition to the subtle and classic signs and symptoms of infection, the person may present with signs of sepsis including:                             <ul style="list-style-type: none"> <li>○ Pyrexia or hypothermia</li> <li>○ Tachycardia</li> <li>○ Tachypnea</li> <li>○ Elevated or depressed white cell counts</li> <li>○ Multi-organ system failure</li> </ul> </li> </ul>	Intervention required, i.e.: <ul style="list-style-type: none"> <li>• Topical antimicrobials</li> <li>• Effective debridement</li> <li>• Systemic antibiotics</li> <li>• Rule out other sources of infection</li> </ul>

### Reference

Keast D and Lindholm C. Ensuring that the correct antimicrobial dressing is selected. Wounds International. 2012;3(3):22-28. Used with permission from author.

