

Trigger Points: When to Use the Biosafety Cabinet

The source, the Gram stain morphology and/or the growth of specimens may indicate the need to use the biosafety cabinet when performing certain activities.

	<h3>SOURCE</h3>
<p><i>BMBL guidelines advocate the use of a BSC when inoculating specimens from certain sources.</i></p>	
<p>✓ Inoculation of cultures and preparation of smears from body fluid specimens (except urine).</p>	
<p>✓ Inoculation of all respiratory specimens, since they may contain <i>M. tuberculosis</i>, SARS or similar significant respiratory pathogens.</p>	
<p>✓ Performance of subcultures and preparation of smears from blood culture bottles.</p>	
<p>✓ Manipulation of specimens collected at autopsy.</p>	
	<h3>GRAM STAIN MORPHOLOGY</h3>
<p><i>Gram stain morphology can be a trigger point for BSC usage when interpreted in conjunction with source and/or culture growth.</i></p>	
<p>✓ On a specimen from a sterile site, a direct Gram stain showing Gram negative diplococci is indicative of <i>Neisseria meningitidis</i>.</p>	
<p>✓ Small, Gram negative coccobacilli which fail to grow after 48 hours of incubation can indicate a dangerous pathogen</p>	
	<h3>GROWTH</h3>
<p><i>Reading plates containing, or suspected of containing certain pathogens and working with the growth from these cultures should be carried out inside the BSC, including:</i></p>	
<p>✓ Any cultures suspected to be VISA or VRSA.</p>	
<p>✓ Broth or plate cultures of suspect or known <i>Neisseria meningitidis</i>, <i>Francisella tularensis</i>, <i>Brucella</i> species, or any culture with small gram-negative coccobacilli that fail to grow after 48 hours of incubation.</p>	
<p>✓ Any cultures containing mold-phase (filamentous growth) fungi.</p>	

Note: The above-mentioned are the minimum that should be included in the SOP.