KEEPING YOU SAFE!

QUICK REACTION GUIDE FOR EMERGENCY RESPONSE TO SARS-COV-2/COVID-19 INCIDENTS

This guide is based upon a level of risk determined by a responder's activity along with current community circumstances. This risk is then used to select the protective equipment necessary based upon the highest operational risk.


Where Population Density is defined as:
1. High Density: ≥ 10,000 people per square mile
2. Medium Density: 1000 people per square mile ≤ population density < 10,000 people per square mile
3. Low Density: < 1000 people per square mile

Where the Density of SARS-CoV-2 infections is defined as:
4. High: ≥ 1,000 infections per 100,000 people
5. Low: < 1,000 infections per 100,000 people

More information on our range of events via www.cbrneworld.com
Dr Christina Baxter, of Emergencyresponse.com, offers helpful advice for first responders. This issue is for Sars-Cov-2/Covid-19 incidents.

**STEP 2: Determining the Minimum Acceptable Personal Protective Equipment**

<table>
<thead>
<tr>
<th>Level of Risk</th>
<th>Example Actions</th>
<th>Respiratory &amp; Ocular Protection</th>
<th>Gloves &amp; Garments</th>
</tr>
</thead>
</table>
| **HIGH**      | - All interactions with COVID-19 positive subjects not wearing masks  
- All interactions with COVID-19 subjects wearing masks in high density/high infection areas | Respirator Non-venting goggles | Gloves Garment |
| **MEDIUM**    | - All interactions with COVID-19 positive, asymptomatic subjects, even if wearing a mask in low infection rate areas  
- All interactions with COVID-19 positive, asymptomatic subjects not wearing masks in high infection rate areas | Respirator Safety glasses, goggles, or face shield | Gloves Garment (optional) |
| **LOW**       | All interactions with COVID-19 positive, asymptomatic subjects not wearing masks in low infection rate areas  
- All interactions with COVID-19 positive, asymptomatic subjects wearing masks in high infection rate areas or high population density areas | Medical mask | Gloves |
| **NEGLIGIBLE**| Interactions with COVID-19 positive, asymptomatic subjects wearing masks in low infection rates areas with low or medium population density.  
- Interactions with the general public and persons not determined to be COVID-19 positive. | Barrier face covering | Gloves |

**Respirator**
- **Recommended**: Disposable or Reusable (elastomeric 1/2 face, or N95-EN 149-2005/FFP3, or AS/NZS 1716:2012 P2)  
- **Minimum**: NIOSH-approved N, R, P-100 respirator, EN 149-2001 FFP3, or AS/NZS 1716:2012 P2  
- **Consideration**: Can be limited to other international productions meeting the FDA EUA guidelines  
- **Note**: If considering a KN95 from china, consideration should first be given to those listed as approved on Appendix A of the FDA EUA (https://www.fda.gov/media/136663/download) as their performance has been independently verified by NIOSH.

**Masks**
- **Recommended**: Medical mask meeting ASTM F2100 Level 3 or EN 14683:2019 Type IIR  
- **Minimum**: ASTM F2100 Level 2 (or EN 14683:2019 Type II) > ASTM 2100 Level 1 (EN 14683:2019 Type I) > Surgical molded utility mask > utility mask > barrier face covering

**Ocular**
- **Recommended**: ANSI Z87.1, N3 or N5 rated goggles (or EN 166f rated goggles), or full-face respirator  
- **Minimum**: ANSI Z87.1 compliant disposable or reusable face shield, or safety glasses (or EN 166f rated safety glasses or goggles)

**Gloves**
- **Recommended**: Examination gloves meeting ASTM D6319 (nitrile), ASTM D6977 (NMPA 1999, or EN455); Double gloving may offer additional physical protection

**Garments**
- **Recommended**: Single use garments or ensembles certified to NMPA 1999  
- **Minimum**: Any protective garments, including full-coverage uniforms, offering passing viral penetration resistance per ASTM F3167 (or Class 5 of EN 14126 when tested according to ISO 16604), tested for adequate integrity, strength, and durability for intended use; isolation gowns are not appropriate for emergency response use.

More information on our range of events via www.cbrneworld.com