### Pathogens and Other Organisms - Excluded From All Barriers (Shipping Stopped)

If one of these organisms is found in any GRS area, all shipments are suspended and customers are notified.*

<table>
<thead>
<tr>
<th>Organism</th>
<th>Sample Tested</th>
<th>Test Method</th>
<th>Frequency</th>
<th>Mar '18</th>
<th>Feb '18</th>
<th>Jan '18</th>
<th>Nov '17</th>
<th>Previous 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Viruses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ectromelia virus</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/143</td>
</tr>
<tr>
<td>GDVII (Theiler’s) virus</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/143</td>
</tr>
<tr>
<td>Hantaan virus</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/150</td>
</tr>
<tr>
<td>K virus</td>
<td>Serum</td>
<td>ELISA</td>
<td>annually</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0/15</td>
</tr>
<tr>
<td>LDH elevating virus (LDEV)</td>
<td>Serum</td>
<td>Enzyme</td>
<td>annually</td>
<td>0/10</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0/10</td>
</tr>
<tr>
<td>Lymphocytic choriomeningitis (LCMV)</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/143</td>
</tr>
<tr>
<td>Mouse adenovirus (MAV)</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/143</td>
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<tr>
<td>Mouse cytomegalovirus (MCMV)</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/143</td>
</tr>
<tr>
<td>Mouse hepatitis virus (MHV)</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/143</td>
</tr>
<tr>
<td>Mouse minute virus (MMV)</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/143</td>
</tr>
<tr>
<td>Mouse norovirus (MVN)</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
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<td>0/143</td>
</tr>
<tr>
<td>Mouse parvovirus (MPV)</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
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<td>0/16</td>
<td>0/143</td>
</tr>
<tr>
<td>Mouse parvovirus (MPV)*</td>
<td>Lymph node</td>
<td>PCR</td>
<td>6 weeks</td>
<td>0/06</td>
<td>0/06</td>
<td>0/06</td>
<td>0/06</td>
<td>0/54</td>
</tr>
<tr>
<td>Mouse thymic virus (MTV)</td>
<td>Serum</td>
<td>IFA</td>
<td>quarterly</td>
<td>-</td>
<td>0/16</td>
<td>0/15</td>
<td>-</td>
<td>0/63</td>
</tr>
<tr>
<td>Pneumonia virus of mice (PVM)</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/143</td>
</tr>
<tr>
<td>Polyoma virus</td>
<td>Serum</td>
<td>ELISA</td>
<td>annually</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0/15</td>
</tr>
<tr>
<td>Reovirus 3 (REO 3)</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/143</td>
</tr>
<tr>
<td>Rotavirus (EDIM)</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/143</td>
</tr>
<tr>
<td>Sendai virus</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/143</td>
</tr>
<tr>
<td><strong>Bacteria &amp; Mycoplasma</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bordetella spp.</td>
<td>Oropharynx</td>
<td>Culture</td>
<td>6 weeks</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/191</td>
</tr>
<tr>
<td>CAR bacillus</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/143</td>
</tr>
<tr>
<td>Citrobacter rodentium</td>
<td>Intestine or feces</td>
<td>Culture</td>
<td>6 weeks</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/191</td>
</tr>
<tr>
<td>Clostridium piliforme</td>
<td>Serum</td>
<td>ELISA</td>
<td>quarterly</td>
<td>-</td>
<td>0/16</td>
<td>0/16</td>
<td>-</td>
<td>0/64</td>
</tr>
<tr>
<td>Corynebacterium bovis</td>
<td>Oropharynx/skin</td>
<td>Culture</td>
<td>6 weeks</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/194</td>
</tr>
<tr>
<td>Corynebacterium kutscheri</td>
<td>Oropharynx</td>
<td>Culture</td>
<td>6 weeks</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/191</td>
</tr>
<tr>
<td>Helicobacter spp.</td>
<td>Intestine or feces</td>
<td>PCR</td>
<td>6 weeks</td>
<td>0/06</td>
<td>0/06</td>
<td>0/06</td>
<td>0/06</td>
<td>0/54</td>
</tr>
<tr>
<td>Mycoplasma pulmonis</td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/143</td>
</tr>
<tr>
<td>Pasteurella spp.</td>
<td>Oropharynx</td>
<td>Culture</td>
<td>6 weeks</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/191</td>
</tr>
<tr>
<td>Salmonella spp.</td>
<td>Intestine or feces</td>
<td>Culture</td>
<td>6 weeks</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/191</td>
</tr>
<tr>
<td>Streptobacillus moniliformis</td>
<td>Oropharynx</td>
<td>Culture</td>
<td>6 weeks</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/191</td>
</tr>
</tbody>
</table>

*Additional details regarding our health monitoring program and shipping policy.

†The indicated tests are only performed in rooms that house immunodeficient mice.
### PARASITES & PROTOZOA

<table>
<thead>
<tr>
<th>Organism</th>
<th>Sample Tested</th>
<th>Test Method</th>
<th>Frequency</th>
<th>Mar 26 ’18</th>
<th>Feb 12 ’18</th>
<th>Jan 2 ’18</th>
<th>Nov 20 ’17</th>
<th>Previous 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Encephalitozoon cuniculi</em></td>
<td>Serum</td>
<td>MFI</td>
<td>6 weeks</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/16</td>
<td>0/143</td>
</tr>
<tr>
<td>Ectoparasites (fleas, lice, mites)</td>
<td>Fur</td>
<td>Visual</td>
<td>6 weeks</td>
<td>0/06</td>
<td>0/06</td>
<td>0/06</td>
<td>0/06</td>
<td>0/54</td>
</tr>
<tr>
<td>Endoparasites (tapeworms, pinworms, and other helminths)</td>
<td>Intestine or cecum</td>
<td>Visual</td>
<td>6 weeks</td>
<td>0/06</td>
<td>0/06</td>
<td>0/06</td>
<td>0/06</td>
<td>0/54</td>
</tr>
<tr>
<td>Follicle mites</td>
<td>Subcutis</td>
<td>Visual</td>
<td>6 weeks</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/191</td>
</tr>
<tr>
<td>Opportunistic protozoa (e.g., Giardia, Spironucleus)</td>
<td>Intestine</td>
<td>Microscopy</td>
<td>6 weeks</td>
<td>0/06</td>
<td>0/06</td>
<td>0/06</td>
<td>0/06</td>
<td>0/54</td>
</tr>
</tbody>
</table>

### OPPORTUNISTIC ORGANISMS MONITORED (SHIPPING NOT STOPPED)

All of these organisms are excluded from GRS maximum and high barriers, and most are excluded from standard barrier areas. When a confirmed finding of an excluded organism is made, an investigation is undertaken to identify and eliminate all infected mice from the barrier. Positive results— including results from investigations— are noted in this report, but shipping from the area is not suspended.*

<table>
<thead>
<tr>
<th>Organism</th>
<th>Sample Tested</th>
<th>Test Method</th>
<th>Frequency</th>
<th>Mar 26 ’18</th>
<th>Feb 12 ’18</th>
<th>Jan 2 ’18</th>
<th>Nov 20 ’17</th>
<th>Previous 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Klebsiella pneumoniae</em></td>
<td>Oropharynx, intestine, or feces</td>
<td>Culture</td>
<td>6 weeks</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/191</td>
</tr>
<tr>
<td><em>Klebsiella</em> spp. other than K. pneumoniae*</td>
<td>Oropharynx, intestine, or feces</td>
<td>Culture</td>
<td>6 weeks</td>
<td>10/22</td>
<td>14/22</td>
<td>8/22</td>
<td>9/22</td>
<td>69/191</td>
</tr>
<tr>
<td>Nonpathogenic protozoa (e.g., Trichomonads)</td>
<td>Intestine</td>
<td>Microscopy</td>
<td>6 weeks</td>
<td>0/06</td>
<td>0/06</td>
<td>0/06</td>
<td>0/06</td>
<td>0/54</td>
</tr>
<tr>
<td><em>Pneumocystis murina</em> †</td>
<td>Lung</td>
<td>PCR</td>
<td>6 weeks</td>
<td>0/06</td>
<td>0/06</td>
<td>0/06</td>
<td>0/06</td>
<td>0/54</td>
</tr>
<tr>
<td><em>Proteus mirabilis</em></td>
<td>Oropharynx, intestine, or feces</td>
<td>Culture</td>
<td>6 weeks</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/191</td>
</tr>
<tr>
<td><em>Pseudomonas</em> spp.</td>
<td>Intestine or feces</td>
<td>Culture</td>
<td>6 weeks</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/191</td>
</tr>
<tr>
<td><em>Staphylococcus aureus</em></td>
<td>Oropharynx</td>
<td>Culture</td>
<td>6 weeks</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>2/93**</td>
</tr>
<tr>
<td><em>Streptococcus pneumoniae</em></td>
<td>Oropharynx</td>
<td>Culture</td>
<td>6 weeks</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/191</td>
</tr>
<tr>
<td>Beta-hemolytic Streptococcus spp. (non-group D)</td>
<td>Oropharynx</td>
<td>Culture</td>
<td>6 weeks</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/191</td>
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### Gross Pathology

<table>
<thead>
<tr>
<th>Gross Pathology</th>
<th>Test Method</th>
<th>Frequency</th>
<th>Mar 26 ’18</th>
<th>Feb 12 ’18</th>
<th>Jan 2 ’18</th>
<th>Nov 20 ’17</th>
<th>Previous 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Necropsy findings</td>
<td>Exam, histopath</td>
<td>6 weeks</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/22</td>
<td>0/191</td>
</tr>
</tbody>
</table>

**A test & cull effort was initiated to eliminate this organism from this barrier. This investigation has concluded, no additional positives have been found. For additional information call 207-288-6205.

**All tests were performed by The Jackson Laboratory**

James R. Fahey, MS, PhD, DVM, DACVM
Chief of Diagnostic Services & Associate Director
Comparative Medicine & Quality

AX10

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Bar Harbor, ME 04609
1-800-422-6423