SARS also imposed physical and psychological concerns on the healthcare workers. During the later stage of the SARS epidemic, the Taiwan government offered special financial assistance to hospitals and healthcare workers as an incentive to help fight SARS. The country’s National Health Insurance program compensated hospitals for the decrease in revenues, based on the hospital’s reimbursement amount before the SARS epidemic. This measure was effective in motivating other hospitals to accept patients with SARS. The proportion of inpatients with SARS at the hospital dropped from 79.5% during March 10 to April 23, to 46.2% during April 24 to May 1, to 11.6% during May 2 to July 23. This financial assistance program remarkably reduced the impact on the hospital as other hospitals began treating patients with SARS.

Preparations for a medical emergency must address the availability and quality of medical care as well as the implications for public health policy, including political, legal, social, financial, and ethical issues (1). The importance of a sound financial policy cannot be overemphasized. Since the 1980s, healthcare systems have become free market enterprises. Laws and regulations are needed to allow governments to mobilize the resources of all hospitals and compensate them during health crises. Government agencies need to work together with the healthcare system, including health insurance systems and social services, well in advance of epidemic emergencies to maximize limited resources and distribute them equitably.

Democratic societies must preserve human rights (including the right to medical care and freedom from fear), while respecting and protecting the rights and safety of hospitals and healthcare workers. We now face the potential resurgence of SARS, other emerging and reemerging infectious diseases, and the threat of bioterrorism. Careful consideration of the financial issues of hospital management should be an important part of social policy. The emergence of SARS provides a reminder of the potential threat to the entire healthcare system when a new disease suddenly appears. A major lesson from the SARS experience is that government planning and intervention are required.

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Boiling and Bacillus Spores

To the Editor: Public health authorities rely upon “boil water” advisories to alert consumers if a potable water supply is deemed unsuitable for consumption. Holding water at a rolling boil for 1 minute will inactivate waterborne pathogens, including encysted protozoa (1–3). Spores of Bacillus anthracis, the agent that causes anthrax, are one of the microorganisms most refractory to inactivation by the boiling water method. This study was conducted to determine the resistance of spores of B. anthracis Sterne and three other strains of Bacillus spp. in boiling water.

B. anthracis Sterne (Colorado Serum Co., Denver, CO) was grown on soil extract peptone beef extract medium (4). Spores were harvested from the agar plates and washed four times by centrifugation with sterile distilled water, treated with 50% (vol/vol) ethanol while being shaken at 100 rpm for 2 h, then washed an additional four times by centrifugation with sterile distilled water. Spores of one of the B. cereus strains were obtained from a commercial source (Raven Biological Laboratories, Omaha, NE). Spores were produced in broth cultures for the other Bacillus
Table. Inactivation of Bacillus spp. by boiling in tap water

<table>
<thead>
<tr>
<th>Organism</th>
<th>Initial log&lt;sub&gt;10&lt;/sub&gt; CFU/mL</th>
<th>Boiling times&lt;sup&gt;3&lt;/sup&gt;log&lt;sub&gt;10&lt;/sub&gt; CFU/mL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Covered</td>
<td>Uncovered</td>
</tr>
<tr>
<td>B. anthracis Sterne</td>
<td>4.95</td>
<td>4.92</td>
</tr>
<tr>
<td>B. cereus (commercial)</td>
<td>4.62</td>
<td>4.59</td>
</tr>
<tr>
<td>B. cereus, ATCC 9552</td>
<td>4.54</td>
<td>4.76</td>
</tr>
<tr>
<td>B. thuringiensis ATCC 35646</td>
<td>4.63</td>
<td>4.46</td>
</tr>
</tbody>
</table>

<sup>1</sup>Values are means of duplicate experiments.<sup>2</sup>0.25 log units.<sup>3</sup>N.D., not determined.

References


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