of patients—is supported by the observed increase in ODs seen in most of the samples that retested positive. Carry over of material from samples with high levels of toxin may also have contributed.

Emerging infectious diseases are not always obvious

David M Morens and colleagues1 published a fine Historical Review in November, 2008. The authors noted measures taken in Europe to address cholera, such as a central health commission in Paris that addressed sanitary measures in 1831, along with epidemiological reports in the newspapers of the time.

It might be worth mentioning that those efforts pre-date the acceptance of an infectious cause of cholera by 53 years.1 The commission was probably attempting to reduce clouds of toxic gas that were believed to cause cholera. At that time, cholera was neither considered waterborne nor infectious.

The Italian scientist Filippo Pacini identified the bacterial cause of cholera in 1854, but his writings were discounted by experts. An 1874 commission with representatives from 21 nations declared unanimously that cholera was caused by airborne toxins.3 An infectious cause for cholera was not accepted until 1884, and even then only after experts drank cultures of Vibrio cholerae to prove it was non-pathogenic. Max Joseph von Pettenkofer, a professor from Munich, was insufficiently impressed with his response to the infection, and declared, “germs are of no account in cholera. The important thing is the disposition of the individual.”4

The causes of epidemic gastrointestinal illnesses are not always obvious.

Kenneth Boorom
Blastocystis Research Foundation, Corvallis, OR, USA
kboorom@bhomcenter.org
I declare that I have no conflict of interest.