

# STANDARD DEVIATIONS: Noticing What's Not On Your Radar

Never mind,

This isn't going to change your life, I promise. But the world is a big place and things happen all the time that we never hear about. Some of those things are just important to a small group and never get attention. Some of those things are just important to a small group and maybe we should pay attention. Here are a couple news items that you may not find "newsworthy" but might find interesting, as health care professionals.

1. The USS Fort McHenry, a Navy warship deployed to the Persian Gulf, has been in quarantine at sea for just under three months.



The only reports about this have come after requests from news sources. At least 25 sailors are reported to be affected by a viral infection described as parotitis, with similar symptoms to mumps. Reports state that of the 700+ crew, only 25 were affected and most have returned to duty. Viral parotitis is an infection of the saliva glands on either side of the face that's typically caused by the mumps, which can be prevented through vaccination.

The ship is still quarantined. It moored last in Romania, January 7 and departed on 1/11. There have been three replenishment-at-sea events, since.

When someone joins the Army, Navy, Air Force, Marine Corps, or Coast Guard, titers are established for vaccine-preventable diseases. MMR is one of the vaccines routinely given (along with a slew of other normal and military-specific vaccines). This ain't mumps. And in the near three months in quarantine, no formal diagnosis has been made.

2. On March 31, 2019, public health officials in Guyana (remember the Jonestown cult?) reported an unusual outbreak in mine workers at Guyana Manganese Incorporated (GMI). This is located in Northwest Guyana near Matthew's Ridge (see map).



A National Emergency Operations Centre (NEOC) statement reads:

“The seven employees who are currently hospitalised at the Georgetown Public Hospital displayed symptoms of pain, fever, headache and respiratory distress, which resulted in the death of another worker.”

Minister of Public Health, Volda Lawrence, said then that the disease or virus which resulted in the death of a Chinese national, and have left eight other persons including a Guyanese hospitalized, has not been identified.

The seven Chinese men and one Guyanese were cleaning a manganese tunnel at Matthew's Ridge, North West District last week, and were air-lifted to the city after the men contracted a virus or disease.

Tests are running but no identification has been made, although two patients have tested positive for Leptospirosis. This bacterial infection is marked by fever, headache, vomiting, diarrhea, rash, and jaundice in a primary stage and may progress to organ failure, meningitis, and death. It is acquired through contaminated water or contact with urine from infected animals. Over 500,000 human cases of severe leptospirosis are thought to occur each year worldwide, with a mortality rate of over 10%. **Asymptomatic or subclinical human infections are common**, making leptospirosis far more prevalent than currently diagnosed or recognized. These miners were clearing bat guano and bats are currently being studied as reservoirs for the spirochete.

Normally, I wouldn't think too much about this. BUT..."The decision was taken to transfer all the patients with the acute respiratory illness, rash and fever." And **the hospital where these patients were initially transported has been shut down**, and the staff (and operations) moved to a community health center, in order to allow the facility to be 'fumigated'.

On April 1, six more miners were air-lifted out to Georgetown Public Hospital and quarantined. Five more were medevacked Tuesday. And here's a pic of the staff doing transport....pretty serious PPE.



The mining operation has also been shut down until given clearance by the Ministry of Health and the Occupational Health and Safety Department of the Ministry of Social Protection.

Add to this information the facts that the deceased "was ailing for days before seeking medical attention at the Matthews Ridge Hospital last Thursday", that all these men were working together, that two more evacuations have occurred (18 total patients), that person-to-person transmission of Leptospirosis is not known, and that only two are positive (for a condition known to be fairly common, asymptomatic, and endemic), that bats are known reservoirs for hemorrhagic viruses (Ebola, Nipah, MERS CoV), and the situation becomes a bit more interesting.

Outbreaks occur unexpectedly; that's just their nature. Here are two events to keep an eye on. Even if we have to look hard to see them, we should keep them on our radar. No news on either since April 4, 2019.

Have a great week and be safe,

Bryan