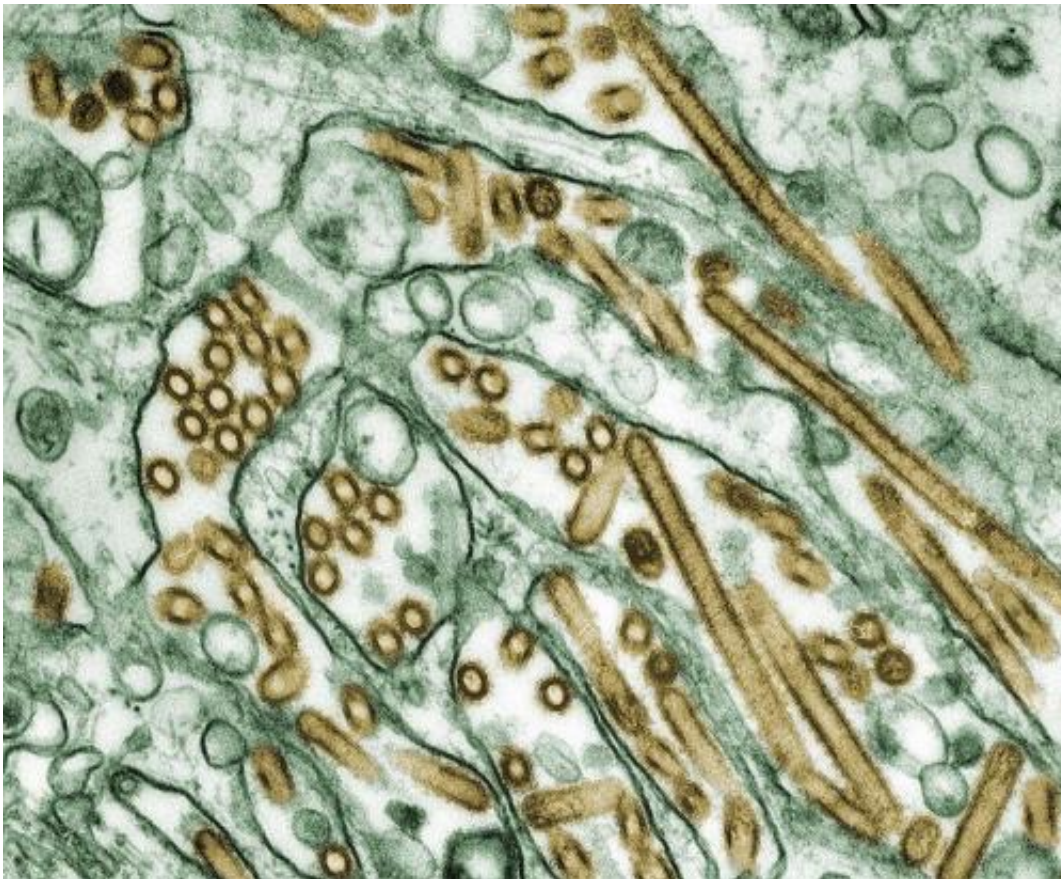


Signs of avian flu found in San Francisco wastewater

July 1 2024, by Susanne Rust, Los Angeles Times



Colorized transmission electron micrograph of Avian influenza A H5N1 viruses.
Credit: Public Domain

Signs of H5N1 bird flu virus have been detected at three wastewater sites in California's Bay Area, according to sampling data.

While positive wastewater samples have been found in seven other states, California is the only one that has yet to report a [bird flu outbreak](#) in a herd of dairy cows.

Genetic evidence of [bird flu](#) was detected in San Francisco wastewater on June 18 and June 26. Additional H5 "hits" were seen at a site in Palo Alto on June 19, and another on June 10 from the West County Wastewater facility in Richmond.

According to the San Francisco Department of Public Health, officials have been closely monitoring H5N1 along with federal, state and local partners, and are "aware of the recent detections of fragments of H5N1 in San Francisco's wastewater."

"As with the previous detections reported from before mid-May 2024, it is unclear what the source of H5N1 is, and an investigation is ongoing," wrote department officials in a statement. "It is possible that it originated from bird waste or waste from other animals due to San Francisco's sewer system that collects and treats both wastewater and stormwater in the same network of pipes."

Health officials said the risk remains low for the general public.

The virus has not been identified in California cows, but it has been found in wild birds and domestic poultry in the state.

The finding "is concerning" because of their urban origin, said Devabhaktuni Srikrishna, an entrepreneur who is developing techniques for disease detection, and the chief executive and founder of PatientKnowHow.com. "There are not many dairy or animal farms in San Francisco."

There are also no dairy farms in Palo Alto or Richmond.

The plant manager from Palo Alto was out of the office, so could not comment. A spokesperson for the Richmond site directed questions to the state.

A request for comment from the state's Wastewater Surveillance Program had not yet been returned.

Although the samples from the Bay Area wastewater sites tested positive for H5, the testing was not specific to H5N1.

However, researchers say a positive genetic identification for H5 is suggestive of bird flu—whether H5N1, the virus that has been found in U.S. dairy cattle (and which has infected three dairy workers) or H5N2, the subtype implicated in the death of a man from Mexico City this month.

Most human influenza A viruses are of the H1 and H3 variety.

The virus has been detected in 133 dairy herds across 12 states. It has also been found in [wild birds](#) and domestic poultry flocks throughout the United States.

In recent weeks, H5 was also detected in wastewater samples in Idaho, among other states.

While there is "no threat to the general public from the H5 detection in [wastewater](#)" at this time, said Christine Hahn, Idaho state epidemiologist, "we have determined that it is important that we work to understand these recent findings as much as possible."

The state is working in conjunction with the Centers for Disease Control and Prevention to investigate the issue.

WastewaterSCAN, the research organization that detected the virus, is an infectious disease monitoring network run by researchers at Stanford, Emory University and Verily, Alphabet Inc.'s life sciences organization.

A review of their data—which samples from 194 locations across the country—suggests H5 has also been detected at sites in Michigan, Texas, Minnesota, South Dakota and Iowa.

California is the only one of these states that has not reported H5N1-infected cattle.

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