CORONAVIRUS OUTBREAK

New site tracks virus in Illinois wastewater

By Adriana Perez

Chicago Tribune

Local researchers and scientists have been testing wastewater for COVID-19 since 2020, even recently turning to use tampons in order to swab human waste in sewers.

Now, Illinois residents will be able to keep an eye on the levels of COVID-19 in their community as measured by 75 wastewater treatment plants in the state.

The University of Illinois' Discovery Partners Institute and the Illinois Department of Public Health announced Tuesday the launch of a new interactive website accessible to the public and researchers.

"It gives the general public an idea, and they can decide for themselves," said the institute's senior research scientist and wastewater team lead Sandra Gesing. "Maybe it's time to wear a mask again, for example."

"IDPH is really working hard to give transparency and individuality to people to make those calls," said Bill Jackson, executive director of the institute. "And that's what this site allows to happen."

As more people test for the virus at home and fewer people report cases to authorities, wastewater testing has become a more reliable form of determining community COVID-19 levels.

"The great thing about wastewater is it gives you a surveillance capability but it also allows you flexibility to figure out where, how, what happened where the breakout did happen," Jackson said.

The dashboard is designed to make educa-

tional information more accessible to different ages and levels of experience, "from kindergartners to seniors," and to promote wastewater testing, according to Gesing.

The website offers charts with data from the COVID Data Tracker in the Centers for Disease Control and Prevention website and also includes data from the 75 wastewater treatment plants across Illinois. Information on the website can be found by city or county.

Researchers collect samples twice a week and take them to a lab at the University of Illinois at Chicago for analysis. The samples are then taken to Argonne National Laboratory for genetic sequencing in order to identify any virus variants.

A future version of the website will include information in Spanish and possibly other languages — "because Illinois is really a multinational place," Gesing said. It also might include educational videos for children and data on what variants of COVID-19 are present in the wastewater.

The institute has begun testing wastewater samples for influenza A and B and will soon begin tracking those on the website, as well. In 2013, sewage monitoring helped researchers trace a polio outbreak in Israel and, more recently, directed social services in many American cities hit hard by the opioid epidemic.

Scientists have used tampons in the past to detect the presence of other diseases in wastewater such as cholera.

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