National Wastewater Surveillance System for SARS-CoV-2 and Other Infectious Disease Targets of Public Health Concern

Request for OMB approval of a New Collection

October 6, 2023

Supporting Statement B

Contact: Rudith Vice National Center for Emerging and Zoonotic Infectious Diseases Centers for Disease Control and Prevention 1600 Clifton Road, NE Atlanta, Georgia 30333 Phone: (404) 718-7292 Email: <u>nhr9@cdc.gov</u>

Table of Contents

1.	Respondent Universe and Sampling Methods	2
2.	Procedures for the Collection of Information	2
3.	Methods to maximize Response Rates and Deal with No Response	3
4.	Tests of Procedures or Methods to be Undertaken	. 3
5.	Individuals Consulted on Statistical Aspects and Individuals Collecting and/or An	alyzing Data

4

This data collection does not involve statistical methods. Once collected, data may be analyzed by methods such as trend calculation for the purpose of making statistical generalizations beyond the particular respondents.

1. Respondent Universe and Sampling Methods

Respondents are US state, tribal, local and territorial (STLT) health departments, wastewater utilities, and private contract laboratories. This collection may come from any wastewater utility or STLT jurisdiction in the United States. The selection of STLT health department will be determined based on state public health interest in wastewater surveillance, state priorities, resources and capacity, and selection of wastewater utilities will be determined by STLT health department resources and public health priorities in coordination and discussion with local wastewater utilities or other public health partners. The selection of contract laboratories will be determined based on a competitive contract proposal submission process with objective evaluations led by the CDC.

2. Procedures for the Collection of Information

Wastewater data collection will be coordinated by state, tribal, local, and territorial (STLT) health department jurisdictions in close collaboration with wastewater utilities and the Centers for Disease Control and Prevention (CDC). Data will also be collected by private contract laboratories, working closely with wastewater utility partners. Wastewater utilities or partners will collect samples from wastewater influent lines or at other points in the collection stream at regular intervals, such as twice a week. The wastewater samples will be shipped, along with their associated sampling metadata, to STLT health departments where pathogen- or target-specific RNA or DNA will be quantified for up to 40 targets (e.g., SARS-CoV-2, mpox, influenza, antibiotic resistance, etc.). Data collection for specific infectious diseases or targets will be based on public health need and input from an internal CDC Advisory Council comprised of subject matter experts from across CDC. For some wastewater samples, target sequencing will be conducted to help public health officials monitor infectious disease variant trends (e.g., SARS-CoV-2). STLT health departments will compile, review, and submit testing data to CDC through the NWSS DCIPHER platform, or national contract laboratories will submit data directly

to the CDC. STLT health departments will work with participating wastewater utilities to obtain spatial files of the utility service areas, also called a sewershed. These sewershed spatial files will be uploaded by jurisdiction health departments into the NWSS DCIPHER platform. No forms are to be submitted for this component of the data collection, only spatial files. STLT health departments may choose to develop a line list of reported cases of specific infections (e.g., COVID-19, mpox, influenza, antibiotic resistant infections, etc.) associated with the participating wastewater utility service areas, for which wastewater testing data is also being collected. The STLT health department will submit to CDC the line list of deidentified cases into the NWSS DCIPHER platform. This collection may come from any wastewater treatment plant in the United States or wastewater influent or effluent line associated with a wastewater utility sewershed, or from upstream collection sites or along the treatment pathway. The choice of collection sites will be determined by STLT health departments in coordination with local wastewater utilities or other public health partners. Sampling and collection sites by contract laboratories will be chosen in coordination with wastewater utility partners.

3. Methods to maximize Response Rates and Deal with No Response

Not applicable.

4. Tests of Procedures or Methods to be undertaken

This information collection request is built upon a project currently approved under the COVID-19 public health emergency PRA waiver. The instruments, procedures, and methods in this data collection were refined to minimize burden and improve utility, in part, during a wastewater data pilot collection with three state participants conducted during the COVID-19 response. Over several months, pilot states submitted, at minimum, bi-weekly SARS-CoV-2 wastewater sample data to the CDC NWSS DCIPHER data system. In coordination with these pilot states, we determined and refined the average annualized burden to collect wastewater testing data, which also served as the basis for determining the average annualized burden to collect wastewater testing and sequencing data for other infectious disease or public health targets, the use of collection instruments, as well as for collection and submission of sewershed spatial files and deidentified sewershed case data and associated collection instruments.

5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

None.