



## INVITATION TO RURAL, TERRITORIAL, AND TRIBAL COMMUNITIES TO APPLY TO RECEIVE A FREE WASTEWATER SURVEILLANCE RAPID TESTING PACKAGE

Responses accepted through 11:59 pm Eastern Time on Friday, February 21, 2025, at:  
<https://wef.secure-platform.com/a/solicitations/351/home>

### Background

During the COVID-19 pandemic, wastewater-based disease surveillance emerged as a tool for understanding COVID-19 infection trends in communities independent of healthcare-seeking behavior and clinical testing resources. Because of the intensive labor and capital required for PCR testing, wastewater SARS-CoV-2 quantification has typically been the domain of well-equipped academic, public health, and wastewater utility laboratories. Wastewater testing for sites without onsite laboratories but where such information might be particularly helpful—such as schools, long-term care facilities, prisons, and jails—requires that samples be sent offsite to suitable laboratories for analysis which can impair the actionability of the wastewater data.

For its Rapid Wastewater SARS-CoV-2 Testing Challenge (Challenge) in early 2022, the Water Environment Federation (WEF) collaborated with the U.S. Centers for Disease Control and Prevention (CDC) to identify simple, “point-of-use” analytical methods for wastewater SARS-CoV-2 quantification that can be used to generate useable data within hours of sample collection. The GeneXpert Automated PCR, offered by Cepheid and Hach, was selected as one of the Challenge winners. This technology fully automates the extraction and measurement of SARS-CoV-2 in wastewater in a self-contained cartridge. Each PCR analysis takes approximately 45 minutes with <5 minutes of hands-on time, and no prior laboratory experience is required. Further, “multi-target” cartridges are available for the GeneXpert that measure influenza A, influenza B, and respiratory syncytial virus (RSV)—in addition to SARS-COV-2. In 2023, WEF completed a GeneXpert testing pilot with five participating sites that confirmed the user-friendly nature of this testing approach.

**WEF is inviting applications from wastewater utilities and other organizations interested in receiving a GeneXpert Automated PCR device package, including 200 respiratory cartridges (e.g., enough for one year of testing 3 to 4 times per week) that yield results for influenza A, influenza B, RSV, and SARS-CoV-2. Up to 20 eligible utilities/organizations will receive a GeneXpert testing package as part of this program.**

### Eligibility

Applications are invited from wastewater utilities or other organizations (such as local health departments or school districts) that have a demonstrated need for a GeneXpert testing package and serve communities meeting one or more of the following criteria:

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- Located in a rural county, as defined by the Health Resources and Service Administration<sup>1</sup>
- Located in a U.S. territory
- Serving a tribe or tribal community

Please note that organizations that have already received a GeneXpert package from WEF as part of the pilot program are not eligible to apply. Further, organizations are only eligible to receive one GeneXpert package each as part of this program.

## Items Included with the Wastewater Surveillance Rapid Testing Package

Organizations participating in this program will receive the following at no cost:

- One 4-bay GeneXpert IV Automated PCR device with 2 active modules
- Laptop loaded with GeneXpert software
- 200 respiratory GeneXpert cartridges for detection and quantification of influenza A, influenza B, RSV, and SARS-CoV-2 RNA
- 200 disposable pipettes
- Personal protective equipment (PPE): disposable gloves, safety glasses, and face masks
- Training on the use of the GeneXpert device, software, and PPE, and instructions on how to extract quantitative results from the GeneXpert output files

## Anticipated Schedule

Organizations are invited to submit their applications for participation in this program by February 21, 2025. GeneXpert shipment is expected to take place in March and April 2025.

## Application Requirements

WEF requests that organizations submit the following information to be considered for this program:

- Organization representative name, title, email address, and phone number
- Brief description of the proposed sampling location and the number of people captured by that sampling location and name of county in which served population is located
- Brief description of how the applicant meets the eligibility criteria (for being located in a rural county or a U.S. territory or serving a tribe or tribal community)
- Brief description of why the organization would benefit from receiving a GeneXpert testing package
- Brief description of how the applicant organization will coordinate with any relevant public health entities to share the wastewater data for public health action

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<sup>1</sup> See this document for a list of rural counties: <https://data.hrsa.gov/Content/Documents/tools/rural-health/forhpeligibleareas.pdf>

## Application Evaluation Criteria

Applications submitted by the deadline will be reviewed by an independent committee comprised of health department, academic, and utility representatives for completeness and to confirm that the eligibility criteria have been met. If complete applications from more than 20 organizations are received, priority will be given to communities in locations with higher social vulnerability, based on the Social Vulnerability Index (SVI)<sup>2</sup> and Environmental Justice Index (EJI)<sup>3</sup> data for the census block and/or county in which the served population resides.

## Question Submittal Information

Please email Anna Mehrotra at [amehrotra@wef.org](mailto:amehrotra@wef.org) with any questions about the application process.

## Application Submittal Information

Applications should be submitted at <https://wef.secure-platform.com/a/solicitations/351/home> ***no later than 11:59 pm on February 21, 2025***. At this online portal, organizations will enter the requested information detailed in the “Application Requirements” section. Note that a WEF membership is NOT required to submit an application. However, an applicant will need to create a free account to be able to access the online application portal (if they don’t already have one). ***After entering the requested information, please don’t forget to hit “Save and Finalize” (instead of “Save”) and then click “OK”, or your application will not be processed.*** Organizations for which this causes an undue burden may contact WEF by January 24, 2025, to discuss alternative submission methods. Proposals submitted by email without prior approval will not be accepted.

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<sup>2</sup> <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>

<sup>3</sup> <https://www.atsdr.cdc.gov/placeandhealth/eji/index.html>

**Brief description of the proposed sampling location and the number of people captured by that sampling location (150 words or fewer)**

The proposed wastewater sampling will take place at municipal and private water cooperative plants across Hidalgo County, Texas. Each plant services an average of 4,000 to 8,000 residents, ensuring broad coverage of the region's diverse urban and rural populations. By strategically selecting multiple sampling sites, we aim to achieve representative wastewater surveillance that reflects public health trends across our jurisdiction. This initiative will allow us to detect and respond to emerging health threats more effectively, guiding targeted public health interventions to mitigate the spread of infectious diseases.

**Brief description of how the applicant meets the eligibility criteria (for being located in a rural county or a U.S. territory or serving a tribe or tribal community)(150 words or fewer)**

Hidalgo County is a medically underserved region along the U.S.-Mexico border, with a mix of rural and urban communities. Many areas within the county lack access to healthcare resources, contributing to disparities in disease detection and prevention. Additionally, a significant portion of the population is uninsured, making alternative surveillance methods, such as wastewater testing, critical for tracking public health trends. The county's agricultural activity and international border proximity further contribute to unique health challenges that require enhanced surveillance and tailored public health strategies.

**Brief description of why the organization would benefit from receiving a GeneXpert testing package (150 words or fewer)**

Receiving a GeneXpert testing package would allow Hidalgo County Health and Human Services to rapidly analyze wastewater for SARS-CoV-2, influenza, and RSV with minimal hands-on time and no prior laboratory experience required. This capability would enhance our epidemiological surveillance efforts, helping us detect illness trends in real-time and allocate resources accordingly. Additionally, this opportunity would provide our laboratory team with valuable experience in wastewater testing, allowing us to one day expand surveillance efforts in the future to include other public health indicators beyond respiratory viruses.

**Brief description of how the applicant organization will coordinate with any relevant public health entities to share the wastewater data for public health action (150 words or fewer)**

Hidalgo County Health and Human Services will collaborate with municipal public health teams, water utilities, and other stakeholders to share wastewater surveillance data through our "Epi Flow Insight" newsletter. This newsletter will provide updates on disease trends, educational opportunities, and wastewater surveillance findings to inform local response efforts. Additionally, we will engage municipal partners to ensure they can use the data to proactively educate their communities about identified pathogens and health risks. Our team will also work closely with state and federal public health agencies to integrate findings into broader disease surveillance strategies, ultimately enhancing community health protection efforts.