

Traveler-based Genomic Surveillance

Request for OMB approval of a New Information Collection

02/14/2023

Supporting Statement B

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This collection involves statistical methods to make generalizations beyond the particular respondents. For example, SARS-CoV-2 positivity and variant trends will be compared over time and between countries of traveler origin.

1. Respondent Universe and Sampling Methods

Arriving international travelers will be invited to participate in the program from staff at a TGS booth in one of our operating airports. Travelers from certain flights are targeted based on their flight and travel origin country. The goal is to get 30 pools from 30 countries per week to be able to capture with 75% confidence a variant that's at least 5% prevalent in a given country when SARS-CoV-2 prevalence is high. This sampling plan is subject to change based on concerns of over certain regions and modeling and optimization efforts that are ongoing.

2. Procedures for the Collection of Information

We are currently operating in seven U.S. international airports: Atlanta, Los Angeles, New York – JFK, Newark, San Francisco, Seattle, and Washington Dulles. Travelers passing through the airport near the TGS booth will be invited to participate in the program, particularly targeting people getting off flights from countries of interest. The list of countries of interest includes countries with large transit hubs to capture participants from countries with no direct flights, as well as countries with low levels of SARS-CoV-2 sequencing but still have enough direct flights to the airports we operate in to capture approximately 30 pools per week. The list of countries is subject to change as we expand to new airports, and as regions of interest change.

A trained staff member will use language from a script to try to encourage travelers passing by to participate. If the traveler is interested in participating, they will start by filling out a paper or digital consent form as well as a short questionnaire. Both the consent form and questionnaire will be filled out on a digital platform either on the traveler's personal cell phone using a QR code or on one of the program tablets. Paper pamphlets will also be available for participants who prefer paper and in the case of power or wifi outages. The questionnaire will either be filled out by the participant or by trained staff asking the questions. Travelers will be asked to self-collect two lower nasal samples. When requested by the traveler, program staff may collect the sample from the traveler. One swab will be pooled and tested with other travelers from the same flight origin, and the other will be kept for circumstances where more granularity is needed. Pooled samples that are positive for SARS-CoV-2 will be sent for sequencing.

TGS may also test for other pathogens such as influenza. This provides no additional burden to the traveler

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

The most critical data fields in the questionnaire are required. You cannot participate without donating a nasal sample and providing information about where your most recent flight and travel journey originated. The information requested has been kept to the absolute minimum in order to minimize the public burden. Other questions asked including demographic information are optional.

4. Tests of Procedures or Methods to be undertaken

The digital platform was piloted prior to use at all airports.

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

Sample size calculations were done by THB and IDEA in CDC DGMQ. Sarah Guagliardo (ywc2@cdc.gov) led the sample size determination effort. CDC Travelers' Health epidemiologists, as well as XpresCheck and Ginkgo Bioworks contractors will do most of the analyses. Some analyses may be done by other groups at CDC including the Center for Forecasting and Analytics. There may be certain circumstances where outside partners will conduct analyses, but these circumstances will require an MOU with CDC prior to non-public data being shared.