

Example Strategy for Collecting Weekly Respiratory Virus Data Lessons

from Iowa on use of REDCap for Alternate Data

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The State Hygienic Laboratory (SHL) in conjunction with the Iowa Health and Human Services (Iowa HHS) State Influenza Coordinator have been using REDCap to collect respiratory virus test results data from laboratories, hospitals and clinics throughout the state of Iowa since 2009. We have used SurveyMonkey.com and Google.doc to collect data in the past as well but currently are using REDCap.

This data is collected each week by creating a new survey link and distributing it to all the participating sites via an email distribution list. Each year participants on this distribution list are contacted to update contact information. The participants follow the link to an easy to fill out online survey each week to report the total number tested (denominator data) and the total positive (numerator data) for each respiratory virus tested. The survey also collects what test method is used (see attachment).

These data are then totaled by SHL by geographic regions and also state totals. These data are assembled in an excel spreadsheet which lists the county, participating site name and their respective data (see attachment). This spreadsheet is then incorporated into other surveillance data. The weekly spreadsheet is also disseminated to all the participating sites the next week with the current link for that week's survey. The process of providing the previous week's summary data to the participating sites was implemented in 2013 as a way of encouraging participation. The sites have provided feedback that they value seeing what other sites are reporting throughout the state.

Data from the survey is compiled weekly by the Iowa HHS Influenza Surveillance Coordinator along with the public health lab (PHL) data, quick stats for the current reporting week, and statewide, national, and international activity summaries and maps, other respiratory virus positive results, outpatient health care provider surveillance program (ILINet) data, influenza-associated hospitalizations, Iowa school surveillance program data, syndromic surveillance data, influenza vaccination report and an overall regional activity summary and map (see attachment).

For screenshots of the REDCap tool, please see below figures or the attached REDCap data dictionary. Note that the survey has a link to another survey so that labs can give permission to Iowa to pass-through their survey data to NREVSS. Iowa recently modified the format of its survey to make it easier to automate the process of importing Iowa survey data into NREVSS.

Iowa Respiratory Survey 2023-24

Please complete the survey below.

Thank you!

Page 1 of 5

Please allow Iowa HHS to share data with the National Respiratory and Enteric Virus Surveillance System (NREVSS)

If you have not already given us permission, please complete the survey at the link below to allow Iowa HHS to submit your survey data to the NREVSS or if you need to change your facility information.

<https://redcap.link/iowa-nrevss>

If you don't know whether you are a NREVSS facility you can check the list at

<https://www.cdc.gov/surveillance/nrevss/labs/list.html#STATEI>

Facility Information

Facility Name

* must provide value

Start typing to enable auto-complete. Enter other if your facility isn't listed

County where your facility is located

* must provide value

Start typing to enable auto-complete

Week for which you are reporting

* must provide value

Name of Person Reporting Data

* must provide value

Email of the person reporting

* must provide value

Next Page >>

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Did you perform any respiratory viruses antigen detection tests during the week for which you are reporting?

☒ Yes

☐ No

Currently included pathogens are RSV, parainfluenza, respiratory adenovirus, influenza, hMPV and SARS COV-2 / COVID-19?

[reset](#)

* must provide value

See the links below for a partial list of Antigen Test Products

[FDA-Cleared Rapid Influenza Antigen Diagnostic Tests](#) (last updated Aug. 2020)
[In Vitro Diagnostics EUAs - Antigen Diagnostic Tests for SARS-CoV-2](#)

Which of the following antigen detection tests did you perform last week

☒ RSV

☐ Parainfluenza virus

☐ Respiratory adenovirus

☒ Influenza

☐ Human metapneumovirus

☐ SARS COV-2 / COVID-19

* must provide value

RSV Antigen Testing:

Number of RSV Antigen Tests

100

RSV Antigen Positive Results:

RSV A +

0

RSV B +

0

RSV Unknown type +

10

Influenza Antigen Testing:

Number of flu antigen tests

140

Flu Antigen Positive Results:

Flu A +

10

Flu B +

400

The number of positive results should not be more than the number of tests. Please check your answers.

Respiratory Virus Molecular Tests

Facility Name	Other
Facility County	Iowa
Reporting Week	11/26/23 - 12/02/23

Did you perform any molecular respiratory viruses tests during the week for which you are reporting?

☒ Yes
☐ No

[reset](#)

Currently included pathogens are RSV, parainfluenza, respiratory adenovirus, influenza, hMPV, rhino/enterovirus, coronavirus (not COVID-19) or SARS COV-2 / COVID-19?

* must provide value

See the links below for a list of Antigen Test Products

[In Vitro Diagnostics EUAs - Molecular Diagnostic Tests for SARS-CoV-2](#)

[FDA Approved Nucleic Acid Based Tests \(not just respiratory\)](#)

DO NOT INCLUDE test results from specimens sent to SHL in the number of tests or positive results

Which of the following molecular respiratory virus tests did you perform last week?

* must provide value

- ☐ RSV
- ☐ Parainfluenza virus
- ☐ Respiratory adenovirus
- ☒ Influenza
- ☐ hMPV
- ☐ Rhinovirus / enterovirus
- ☐ Coronavirus (not COVID-19)
- ☒ COVID-19

Influenza Molecular Testing:

Number of flu molecular tests

400

Influenza Molecular Positive Results:

Flu AH1N1pm09 +

10

Flu AH3 +

20

Flu A Unknown type +

5

Flu B+

4

COVID-19 Molecular Testing:

Number of COVID-19 Molecular Tests

400

COVID-19 Molecular Positive Results:

COVID-19 +

50

[<< Previous Page](#)

[Next Page >>](#)

Iowa Respiratory Survey 2023-24

Page 4 of 5

Virus Isolation

Facility Name	Other
Facility County	Iowa
Reporting Week	11/26/23 - 12/02/23

Did you attempt to isolate any of the following respiratory viruses from specimens collected during the week for which you are reporting?

☐ Yes

☒ No

[reset](#)

Pathogens on the section are RSV, parainfluenza, respiratory adenovirus, influenza, hMPV or rhinovirus / enterovirus?

* must provide value

[<< Previous Page](#)

[Next Page >>](#)

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