



ELSM

(Electronic Laboratory Surveillance Messaging)

Origin Story

Surveillance remains one of the most potent arrows in public health's quiver for detecting, stopping, understanding and preventing diseases.

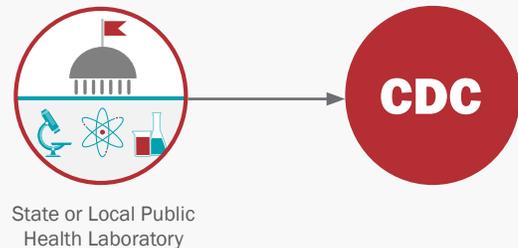
Reliable data communicated in a timely, standardized manner is essential to make surveillance effective. To that end, the Association of Public Health Laboratories (APHL), along with the Centers for Disease Control and Prevention (CDC) and the broader laboratory community, established Electronic Laboratory Surveillance Messaging (ELSM) to automate and accelerate the surveillance data sharing process for influenza and vaccine-preventable diseases.

How It Works

Replacing slower, more cumbersome web- and fax-based processes, ELSM allows state public health labs to send their test results directly to CDC via automated, standardized messages. The many benefits of this streamlined format include:

- Fewer steps (and time) for laboratorians to report data
- More accurate data transmission due to decrease of manual data entry and human error
- Data arrives already formatted for analysis
- Increased frequency of data transmission
- Increased quality and granularity of data

APHL's Public Health Laboratory Interoperability Project (PHLIP) uses ELSM to send influenza testing results to CDC as part of the World Health Organization Global Influenza Surveillance Network. Currently, nearly every state public health laboratory and agency utilizes the PHLIP message route to electronically submit their data to CDC. In addition, APHL's Vaccine Preventable Diseases Project team sends test results via ELSM from reference laboratories to CDC.



COVID-19 Response

In January, APHL worked with CDC and other stakeholders in the PHLIP community to create a new message format in a matter of weeks for states to deliver COVID-19 testing results to CDC. Repurposing the PHLIP message route to send COVID-19 data meant no new infrastructure was needed, so 58 state public health laboratories and agencies were able to quickly start sending data. Hundreds of thousands of COVID-19 messages are transmitted through this mechanism each month.

Additional Reading

[Electronic Laboratory Surveillance Messaging \(ELSM\)](#)