Public Health Surveillance Needs for the COVID-19 Response Data: Elemental to Health

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Data moves securely and seamlessly between three main actors:



Patients

Patients provide health data when seeking medical care



Health Care

Electronic health records generated by health care providers contribute patient medical records to the public health surveillance system



Public Health

Epidemiologists (disease detectives) in state, territorial, local, and tribal departments conduct investigations to control public health threats, while laboratory results confirm diagnoses and support rapid responses. These data are shared with CDC, advancing national health protection But other sources play a role, too:



Non-Traditional

Data sources from the environment, pharmacies, schools, and prescription drug monitoring programs supplement public health surveillance data



Vital Records

Detailed information is collected to keep track of the births and deaths that occur each year

The Public Health 21st Century

Surveillance



Health Protection

Secure, enterprise, interoperable public health data systems rapidly and seamlessly share data, protecting Americans from public health threats of all types—acute, chronic, and emerging

Approach



- Address core areas to support all phases of the response
 - Electronic Case Reporting (eCR)
 - Laboratory Information Systems
 - Electronic Laboratory Reporting to public health
 - Syndromic Surveillance
 - Electronic Vital Records System

How can ONC help: Immediate needs



Challenges:

- Data not reported or reported with missing critical information = Delays in contacting patients, identifying contacts, identifying those at highest risk, creating policy and evaluating control measures
 - Case reports never made or only made by manual reporting phone calls or faxes!
 - Laboratory reports missing patient address, phone number and demographic information (race and ethnicity)
- Many data requests from many levels

Immediate needs:

- Align requests for data: Ensure reporting goes first to state/local public health where the data are acted upon
- Automated reporting of point of care tests with identifiers
- Laboratory:
 - LOINC codes (specimen types matter and shouldn't be blank)
 - Orders contain complete patient information
 - Complete patient information needs to "travel with" the specimen even if forwarded to other laboratories for testing
 - Ask on Order Entry (AOE) questions to be answered at the time of order
 - Employed in healthcare? Y/N/U, Symptomatic? Y/N/U, Hospitalized? Y/N/U, ICU? Y/N/U, Pregnant? Y/N/U
- STANDARD Public health access to EHRs for individual and batch patient look up

How ONC can help: Planning for the fall



- Where do we want public health surveillance to be?
 - Rapid, seamless data sharing from health care to and across the public health enterprise
 - eCR is the transformation we need
 - Patient locating information
 - Demographic information
 - Co-morbidities
 - Point of care tests
 - Treatments
 - Vaccination