

Use Case: MDH Respiratory Disease Reporting Use Case

Overview

Reporting cases of known or suspected communicable diseases to public health authorities in Maryland serves to protect the public's health by ensuring the proper identification and follow-up of cases. Analysis of data across all cases helps to monitor the impact of those conditions, measure trends, identify areas of risk, detect outbreaks, monitor control efforts, and allocate resources effectively. Increased positive results for respiratory disease viruses indicate increased respiratory virus disease activity and increased potential for outbreaks that could lead to different infection protocol and advice across the state.

However, the Maryland Department of Health does not currently have a comprehensive way of monitoring the spread and impact of respiratory diseases across the state outside of COVID-19 and influenza strains. Because CRISP receives laboratory data from many labs across the state, utilizing data through CRISP provides an avenue for respiratory disease reporting to MDH without requiring additional provider burden. In order to detect outbreaks, MDH requests patient-level data on additional respiratory viruses beyond COVID and influenza. MDH would use this information to create a public facing, aggregate dashboard on their website to be used by public health professionals as well as to provide public information on these respiratory viruses.

Governance

According to the Maryland Department of Health's attorneys, Health-General §18-102 authorizes and mandates that the Secretary investigate the causes of diseases, mortality and the influence of locality and other conditions have on health. When the Secretary identifies or believes that a disease endangers that public health in this State, the Secretary is given broad authority to investigate this suspected disease and "act properly to prevent the spread of the disease." Id. Moreover, Health-Gen. §18-103 authorizes the Secretary to obtain accurate and complete reports on communicable disease in the State. These records will aid in the determination of the prevalence of disease and devising a plan to control the spread.

The information gathered in accordance with the authorizing statutes will be shared by the Secretary of Health, and the Maryland Department of Health, to provide personally identifying information for the purposes of ensuring appropriate actions in response to public health issues affecting Maryland citizens. This purpose falls within the permissible uses of "public health and treatment responsibilities" under Health-General §2-101, et seq. and the Health Information Portability and Accountability Act. CRISP currently maintains records that are necessary to fully effectuate this statewide system and ensure rapid identification and treatment of identified persons, and this information is authorized to be shared with and by the Maryland Department of Health.



For a Public Purpose, as permitted or required by Applicable Law and consistent with the mission of the HIE to advance the health and wellness of patients in the CRISP service area (Permitted Purpose #2).

Use Case Description

CRISP will analyze incoming laboratory test results across Maryland sources for specific respiratory tests as provided by MDH. On a weekly basis, CRISP will share positive laboratory results, associated hospitalization data, and death data (as allowed by the Vital Statistics Administration) with MDH for the prior week of the current or recent respiratory disease season. CRISP will also provide aggregate numbers on total tests performed to enable percent-positivity calculations. Based on the patient-level and aggregate data, MDH would create a public facing, aggregate dashboard on their website to be used by public health professionals as well as to provide public information on these respiratory viruses. Along with a dashboard, MDH will use the patient-level data to identify outbreaks among respiratory viruses like parainfluenza and human metapneumovirus, which have recently demonstrated unusually high activity, atypical timing of disease activity, or unusual manifestations of certain seasonal respiratory viruses, like child hepatitis cases linked to a subtype of adenovirus. Patient-level information is necessary to find these anomalous trends that would be obscured by aggregate-only information. Analyses and learnings will be shared with local leaders and providers to improve outbreak prevention and reduce continued infection.

Opt-Out Applicability

Any individual who opts out of CRISP will not have their information included in the data provided for this use case.

Eligible Participants

Designated staff at the MDH Bureau of Infectious Disease will analyze the data for patterns and utilize in public-facing dashboards.

Patient Impact Statement

It is within reasonable expectation that MDH receives information about Maryland residents testing positive for reportable diseases, such as COVID-19. It may be within a reasonable expectation that MDH tracks trends of respiratory diseases in aggregate. It may be beyond a reasonable expectation that MDH receives patient-level information on each positive lab result for respiratory diseases that are not required to be reported to the health department.

Approval DocuSigned by:

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Chairperson

Dated