Electronic Case Reporting

CSTE Stories FROM THE Field

Mandatory reporting of specific health conditions to public health departments is crucial for effective disease monitoring and response. Healthcare providers have historically used manual reporting methods – including faxes, phone calls, and electronic forms – which diverts time from patient care. Electronic case reporting (eCR) automates this process by extracting required information from electronic health records. This enhances efficiency, lessens the workload on healthcare providers, and enables faster responses to emerging public health concerns.

NATIONAL PICTURE

A key benefit of eCR has been the secure, rapid data exchange between clinical healthcare providers and state, tribal, local, and territorial health departments, which improves response to public health threats. In 2020, only 187 facilities were utilizing eCR, but adoption accelerated during the COVID-19 pandemic and rapid onboarding continues. In March 2024, more than 34,200 facilities in all 50 states were actively sending electronic initial case reports of 210 notifiable conditions to public health using eCR.

Removing reporting and data entry burdens for healthcare and public health allows both parties more time to focus on understanding the health issues and taking actions to treat patients or prevent further illness. Expansion of eCR is part of the Centers for Disease Control and Prevention's Public Health Data Strategy (PHDS). Goals for 2024 include integrating eCR into disease surveillance systems in 38 jurisdictions and 35% of critical access hospitals participating in eCR.

ECR IN ACTION

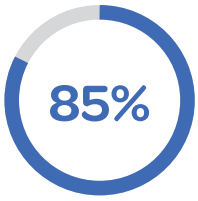
Florida's Increase in eCR Reporting Improves Timeliness and Efficiency

Florida Department of Health's adoption of electronic case reporting (eCR) has significantly improved health outcomes by increasing the efficiency and completeness of health data reporting. The shift to electronic reporting methods has reduced reliance on manual processes such as fax and data entry. Importantly, Florida's use of eCR addresses the challenge of inadequate race and ethnicity data in traditional surveillance sources such as provider reporting. Reportable disease cases are rapidly received and analyzed to ensure high-risk individuals are identified. This enables targeted public health interventions to reduce disease incidence and burden, particularly in disproportionately affected communities. The state's inclusion of race and ethnicity data in eCR demonstrates substantial progress in addressing the burden of disease. Between August 2021 and November 2022, Florida received nearly 195,000 eCR reports for COVID-19, with 89% including race and ethnicity data, surpassing the 65% national average. As eCR expands, it promises to significantly improve Florida's responsiveness to public health threats and the assessment of disease incidence, burden, and outcomes related to race or ethnicity.

SUBMITTED BY: *Shelby Fawaz, Surveillance Informatician, Florida Department of Health; Leah Eisenstein, Surveillance Epidemiologist, Florida Department of Health*

Idaho's eCR Enabled Swift Surveillance, Response to MIS-C

Monitoring children with multisystem inflammatory syndrome (MIS-C) is crucial for understanding the syndrome and associated risk factors. Typically diagnosed weeks after acute SARS-CoV-2 infection, children may not test positive for the virus using standard viral tests upon hospital admission, thus it is rarely detected in electronic laboratory reporting. Through eCR, 85% of MIS-C cases have come to the attention of Idaho's Division of Public Health. With the state's sole specialty children's hospital located in the southwest, children are often transferred out of state, including to Salt Lake City, Utah. Thanks to Utah's widespread eCR adoption and the national eCR infrastructure, Idaho swiftly received eCRs for children diagnosed with MIS-C enabling a timely public health response and investigation. During 2022, medical records contained in the statewide health information exchange were compared to eCRs received for MIS-C diagnoses.



of MIS-C cases reported in Idaho were detected using eCR

Results indicated no cases were missed in Idaho facilities with eCR implementation.

SUBMITTED BY: *Kathryn Turner, PhD, MPH, Deputy State Epidemiologist and Chief, Bureau of Communicable Disease Prevention Division of Public Health, Idaho Department of Health and Welfare*

Minnesota Leverages Data for Public Health Surveillance and Decreasing Provider Reporting Burden

In 2020, the Minnesota Department of Health (MDH) swiftly implemented automated eCR processing of COVID-19, replacing manual methods. Initially, manual processing strained resources, prompting automation. This transition accelerated reporting timelines and enabled daily eCR processing to increase from 500 to nearly 4,000 reports with minimal errors, reducing staff entry time from 32 hours to 0 hours. MDH also streamlined the process to deactivate manual COVID-19 reporting for healthcare organizations, to decrease provider burden. Automation has allowed the department's eCR team to focus on other issues/ developments rather than processing eCRs into the surveillance system. MDH continues to promote central solutions for identifying disease-specific information in the eCR rather than every public health program at MDH having to build and maintain individual solutions for identifying and extracting this information for each reportable disease. The department plans to expand and fine-tune the process for

Automation allowed MDH to process 4,000 eCRs per day, reduced staff entry time from 32 to 0 hours, and reduced staff needed for review from 28 to 5

turning manual reporting off for healthcare organizations after full-scale eCR adoption for all reportable diseases.

SUBMITTED BY: *Sarah Solarz, Application Manager, Minnesota Department of Health*

↘ Story submissions edited for length and clarity.