CDC IIS Data Requirements for COVID-19 Vaccine Administration

Background and Purpose

The ongoing, rapid monitoring of COVID-19 vaccine uptake will be a critical part of the nation's COVID-19 response efforts. Immunization programs and immunization information systems (IIS) will play a critical role in vaccine delivery, the monitoring of vaccine doses administered, and generation of vaccination coverage estimates among several different population groups.

A strong, nationally coordinated approach is critical to collecting, tracking, and analyzing vaccination data, especially in early phases of vaccine administration, which is expected to occur in non-traditional settings. This document outlines the anticipated vaccine administration data elements IIS will report to CDC. The required data elements in this document represent demographic and vaccination information routinely captured by an IIS during a vaccination event. In addition to the ability to collect and report these data elements, IIS will also be required to report information from these data elements 1) in a timely fashion (within 24 hours of administration) and 2) through a connection to the Immunization Gateway (IZ Gateway) or data lake. This will enable CDC to reliably track COVID-19 vaccinations and analyze vaccination coverage by demographic factors once vaccine supplies are available. The vaccine administration data elements in this document will continue to evolve to include inventory and distribution elements as those parameters are finalized.

Discrete Data Elements

Table 1 includes each data element that IIS will be required to report to CDC. Table 2 includes each data element that will be optional for IIS to report to CDC. Optional data requirements will support additional national coverage analysis and vaccination monitoring efforts. Data elements are also categorized as "Mass Vaccination" or "Standard." Standard data elements are likely already collected by IIS, whereas Mass Vaccination data elements are likely to require enhancements or a Mass Vaccination module for data collection and reporting. Any identifiable data elements will be used to facilitate deduplication of data within the Immunization Data Lake, an analytic environment that will be used to consolidate, deduplicate, and reconcile vaccine administration information from multiple sources (e.g. jurisdictional immunization programs, pharmacies, Department of Defense, Veterans Affairs, Bureau of Prisons, Indian Health Service). Identifiable elements will not be stored in the Data Lake environment.

Table 1. Required Data Elements

Required Data Element	Mass Vaccination or Standard
Data elements required for IIS to report	*Mass Vaccination = may require mass vaccination module or enhancement* *Standard = IIS Core Data Element commonly collected during routine vaccination*
Administered at location: facility name/ID	Standard
Administered at location: type	Standard
Administration address (including county)	Standard
Administration date	Standard
CVX (Product)	Standard
Dose number	Standard
IIS Recipient ID*	Standard
IIS vaccination event ID	Standard
Lot Number: Unit of Use and/or Unit of Sale	Standard
MVX (Manufacturer)	Standard
Recipient address*	Standard
Recipient date of birth*	Standard
Recipient name*	Standard
Recipient sex	Standard
Sending organization	Standard
Vaccine administering provider suffix	Standard
Vaccine administering site (on the body)	Standard
Vaccine expiration date	Standard
Vaccine route of administration	Standard
Vaccination series complete	Mass Vaccination

Identifiable Information

Table 2. Optional Data Elements

Optional Data Element	Mass Vaccination or Standard
Data elements optional for IIS to report (e.g., state mass vaccination tool collects this information)	*Mass Vaccination = may require mass vaccination module or enhancement* *Standard = IIS Core Data Element commonly collected during routine vaccination*
Comorbidity status (Y/N)	Mass Vaccination
Recipient ethnicity	Standard
Recipient race	Standard
Recipient missed vaccination appointment (Y/N)	Mass Vaccination
Serology results (Presence of Positive Result, Y/N)	Mass Vaccination
Vaccination Refusal (Y/N)	Standard