

FAQ for COVID-19 Vaccine Reporting

Will CAIR2 accept flat file submission for COVID-19 vaccine reporting?

No.

How can sites submit data to CAIR2?

There are 3 options for reporting summarized on the main **COVID-19 page**.

What data elements are required for reporting?

Data elements required for IIS to report	HL7 Field
Administered at location: facility name/ID	RXA-11.4
Administered at location: type	*
Administration address (including county)	RXA-11.9-RXA-11.15 or *
Administration date	RXA-3
CVX or NDC (Product)	RXA-5
Recipient race	PID-10
Recipient ethnicity	PID-22
IIS recipient ID**	*
IIS vaccination event ID	*
Lot number	RXA-15
MVX (manufacturer)	RXA-17
Recipient address**	PID-11
Recipient date of birth**	PID-7
Recipient name**	PID-5
Recipient sex	PID-8
Sending organization	MSH-4
Vaccine administering provider suffix***	RXA-10.21
Vaccine administering site (on the body)	RXR-2
Vaccine expiration date	RXA-16
Vaccine route of administration	RXR-1
Vaccine administering provider	RXA-10.2/10.3
Vaccine Series	*
Dose number	*

^{*}California IIS functionality exists and can/will generate this information on behalf of the submitter

^{**}Identifiable information

^{***}No longer a required data element, but can still be sent

The following is a sample HL7 message. Note that indentation has been added to each segment for readability. Data Elements required for COVID-19 vaccination reporting are highlighted below. Failure to report required data elements may impact the ability to re-order doses.

MSH|^~\&|MyEMR|DE-000001| |CAIRLO|20201215123030-

0700||VXU^V04^VXU_V04|CA0001|P|2.5.1|||AL|AL|||||Z22^CDCPHINVS|DE-000001

PID|1||PA123456^^^MYEMR^MR||<mark>JONES^GEORGE^M^JR^^^L</mark>|MILLER^MARTHA^G^^^^M||20040227||M||2106-

3^WHITE^CDCREC 1234 W FIRST ST^^BEVERLY

HILLS^CA^90210^^H | | ^PRN^PH^^^888^555555~^PRN^CP^^^888^333333| | ENG^English^HL70296 | | | | | | | <mark>2186-5^</mark>
not Hispanic or Latino^CDCREC | | Y | 2

PD1|||||||02^REMINDER/RECALL - ANY METHOD^HL70215|N|20140730|||A|20140730|

NK1|1|JONES^MARTHA^^^^L|MTH^MOTHER^HL70063|1234 W FIRST ST^^BEVERLY

HILLS^CA^90210^^H|^PRN^PH^^^555^5555555|

ORC|RE||197023^CMC||||||^Clark^Dave||1234567890^Gomez^Janet^^^^^NPPES^L^^^NPI^^^^^MD

RXA|0|1|20201215||208^Pfizer-BioNTech Covid-19 Vaccine^CVX|.3|mL^mL^UCUM||00^NEW IMMUNIZATION

RECORD^NIP001 | 12345^Brown^Sheryl^^^^^CAA^^^CEI^^^^^RN | ^^^DE-

000001||||<mark>P039F|20220531|PFR^Pfizer, Inc^MVX</mark>|||CP|A

RXR C28161 INTRAMUSCULAR NCIT LD LEFT DELTOID HL70163

 $\textbf{OBX} | 1 | \texttt{CE} | 64994\text{-}7^{\texttt{N}} \text{ accine funding program eligibility category} \\ \texttt{LN} | 1 | \texttt{VO1}^{\texttt{N}} \text{ Not VFC} \\$

eligible^HL70064|||||F|||2020121501140500

What codes can I use for required data elements and how are these codes mapped?

All codes can be found at PHINVADS, CDC Code Sets, and/or CDC HL7 v2.5.1 Implementation Guide for Immunization Messaging, Release 1.5.

Select codes and formatting are listed below for reference.

Race | PID-10

Code (PID-10.1)	Description (PID-10.2)	Table (PID-10.3)
1002-5	American Indian or Alaska Native	CDCREC
2028-9	Asian	CDCREC
2076-8	Native Hawaiian or Other Pacific Islander	CDCREC
2054-5	Black or African-American	CDCREC
2106-3	White	CDCREC
2131-1	Other Race	CDCREC

Example: |2028-9^Asian^CDCREC|

Ethnicity | PID-22

Code (PID-22.1)	Description (PID-22.2)	Name of Coding System (PID-22.3)
2135-2	Hispanic or Latino	CDCREC
2186-5	Not Hispanic or Latino	CDCREC
<empty field=""></empty>	Unknown	CDCREC

Example: |2135-2^Hispanic or Latino^CDCREC|

Vaccine Code | RXA-5

Either CVX or NDC codes can be sent to CAIR2.

Code (RXA-5.1)	Description (RXA-5.2)	Name of Coding System (RXA-5.3)
207	Moderna COVID-19 Vaccine	CVX
208	Pfizer-BioNTech COVID-19 Vaccine	CVX
212	Janssen (J&J) COVID-19 Vaccine	CVX
80777-0273-99	Moderna COVID-19 Vaccine	NDC
80777-0273-10	Moderna COVID-19 Vaccine	NDC
80777-0273-98	Moderna COVID-19 Vaccine	NDC
80777-0273-15	Moderna COVID-19 Vaccine	NDC
59267-1000-02	Pfizer-BioNTech COVID-19 Vaccine	NDC
59267-1000-03	Pfizer-BioNTech COVID-19 Vaccine	NDC
59267-1000-01	Pfizer-BioNTech COVID-19 Vaccine	NDC
59676-0580-15	Janssen (J&J) COVID-19 Vaccine	NDC
59676-0580-05	Janssen (J&J) COVID-19 Vaccine	NDC

RXA-5.1 = Identifier

RXA-5.2 = Text

RXA-5.3 = Name of Coding System

Examples: | 208^Pfizer-BioNTech COVID-19 Vaccine^CVX|

|80777-0273-99^Moderna COVID-19 Vaccine^NDC|

All valid CVX, NDC, and additional code sets can be found here.

Administering Provider | RXA-10

At minimum, submit the administering provider Last Name, First Name, and Professional Suffix. If RXA-10.1 is populated, RXA-10.9 and RXA-10.13 are required:

RXA-10.1 = ID Number (Employee ID, NPI, etc.)

RXA-10.2 = Last name

RXA-10.3 = First Name

RXA-10.9 = Assigning Authority (Location Acronym, CMS, CAA, etc.)

RXA-10.13 = Identifier Type Code (EI, NPI, AN, etc.)

RXA-10.21 = Professional Suffix (MD, DO, RN, MA, etc.)

Examples: | ^GOMEZ^MARCIA^^^^^^^^^^^RN|

|1234^GOMEZ^MARCIA^^^^LA HOSP^^^^EI^^^^^RN|

Manufacturer | RXA-17

All valid MVX codes can be found at CDC Code Set – MVX.

RXA-17.1 = MVX Code

RXA-17.2 = Text

RXA-17.3 = MVX

Examples: | SKB^GlaxoSmithKline^MVX |

|PFR^Pfizer, Inc^MVX|

|MOD^Moderna US, Inc.^MVX|

Vaccine Route | RXR-1

Either NCIT or HL7 Table 0162 codes are accepted.

RXR-1.1 = Identifier

RXR-1.2 = Text

RXR-1.3 = Name of Coding System

Examples: |C28161^Intramuscular^NCIT|

|IM^Intramuscular^HL70162|

Administering Body Site | RXR-2

HL7 Table 0163 codes are accepted.

RXR-1.1 = Code

RXR-1.2 = Text

RXR-1.3 = HL70163

Example: |LD^Left Deltoid^HL70163|

Are there any other data elements that are helpful to report?

Yes, if your site is submitting data manually in CAIR2, ensure all staff record all data elements (Patient Information and Vaccine Information) completely and accurately.

If your site submits data electronically, ensure the following data elements are sent to CAIR2. Complete, accurate, and properly formatted data help prevent duplicate patients and assist in the patient match and merge process, among other benefits.

Patient Phone Number / Email | PID-13

CAIR2 can store both Home Phone and Cell Phone as shown below. However, for Cell Phone to be properly populated, PID-13.3 must use type code **CP**. If the patient's cell/mobile phone number is captured in your EHR, please specify PID-13.3 = CP. If valid emails are being captured, this can be sent in PID-13 as well.



Phone number

PID-13.2 = PRN

PID-13.3 = PH (home) or CP (cell phone)

PID-13.6 = area code

PID-13.7 = telephone number

Email address

PID-13.2 = NET

PID-13.3 = Internet or X.400

PID-13.4 = valid email address only

Examples:

|^PRN^PH^^888^555555~^PRN^CP^^888^333333~^NET^Internet^valid_email[@]email[.]com| |^PRN^PH^^888^555555~^PRN^CP^^888^3333333| |^PRN^CP^^888^3333333|

Ordering Authority | ORC-12

CAIR2 is often used a supplementary data source for incentive programs and quality improvement programs/partnerships. Please populate ORC-12 with the Ordering Authority NPI.

ORC-12.1 = NPI #

ORC-12.2 = Last Name

ORC-12.3 = First Name

ORC-12.9 = Assigning Authority

ORC-12.13 = NPI

ORC-12.21 = MD (or other professional suffix; optional field)

Example: |1234567891^LASTname^FIRSTname^^^^^CMS_NPPES^^^^NPI^^^^MD|

Vaccine Eligibility | OBX Segment

There may be additional COVID-19 reporting requirements for Vaccine Funding Program Eligibility and/or Funding Source. Ensure Vaccine Eligibility is recorded for all administered doses.

Vacc. Eligibility categories (HL7):	Vaccine Eligibility Description	CAIR Funding Choices (inventory)
V01	not VFC eligible (Private Pay/Insurance)	Private
V02	VFC eligible – Medi-Cal/Medi-Cal Managed Care	
V03	VFC eligible – Uninsured	VFC
V04	VFC eligible – American Indian/Alaskan Native	VFC
V05	VFC eligible – Underinsured	
V07	Public vaccine – State-specific eligibility [317 Special Funds]	317
CAA01	State General Fund Vaccines	State General Fund

Examples:

OBX|1|CE|64994-7^VACCINE FUND PGM ELIG CAT^LN|1|V01^Private^HL70064|||||F|||20201215|

OBX|1|CE|64994-7^VACCINE FUND PGM ELIG CAT^LN|1|V07^State-specific eligibility [317 Special Funds]^HL70064|||||F|||20201215|

Mother's Maiden Name | PID-6

For patients 18 and younger, please submit Mother's Maiden Name.

PID-6.1 = Maiden Last Name

PID-6.2 = First Name

PID-6.7 = Name Type Code (M = Maiden or can be null)

Examples: |MILLER^^^^M|

|MILLER^MARTHA^^^M|

|^MARTHA^^^^|

Next of Kin | NK1 Segment

If the site is capturing Next of Kin information, please submit this information via the NK1 segment.

NK1-1 = Set ID

NK1-2 = Name

NK1-3 = Relationship

NK1-4 = Address

NK1-5 = Phone number

Example: NK1|1|JONES^MARTHA^^^^L|MTH^Mother^HL70063|1234 W FIRST ST^^BEVERLY

HILLS^CA^90210^^H|^PRN^PH^^^555^5555555|

Who can I contact if I have questions?

If your site enters data manually in CAIR2, contact your Local CAIR Representative.

If your site submits data electronically via an EHR, email CAIRDataExchange@cdph.ca.gov.