

COVID-19 Vaccinations

Data Dictionary – Dose Level View



Last Updated 9/12/2023

LHJ Data Source in IRIS

View Name: VW_ALL_IIS_LHJ

View Description: This is a dose level view that contains all COVID-19 vaccine doses reported to the California Immunization Registry (CAIR2) and the Healthy Futures Registry (the San Diego Immunization Registry was integrated into CAIR2 in April 2022). Doses administered by the following federal agencies and reported directly to the CDC are not included: Veterans Health Administration, Department of Defense, the Federal Bureau of Prisons, and some Indian Health Service clinics.

FIELD DEFINITIONS

Field No.	COVID-19 Data Element	Variable Name	Data Element Description	Value Set
1	Vaccination event ID	vax_event_id	The vaccination event's unique identifier within the system.	n/a
2	Recipient ID	recip_id	Unique ID for this recipient. This can be the ID used by the system or a randomly assigned unique identifier. However, the ID must be consistent across reports to allow linking doses to the same recipient ID.	n/a
3	Recipient name: first	recip_first_name	Recipient's first name.	n/a
4	Recipient name: middle	recip_middle_name	Recipient's middle name.	n/a
5	Recipient name: last	recip_last_name	Recipient's last name.	n/a

Field No.	COVID-19 Data Element	Variable Name	Data Element Description	Value Set
6	Recipient date of birth	recip_dob	Recipient's date of birth.	n/a
7	Recipient age	recip_age	Recipient's age in years.	n/a
8	Recipient age group	recip_age_group	Recipient's age group, in years.	Locally Defined Value Set: Under 5 5-11 12-17 18-49 50-64 65+ Unknown* Birthdates within 60 days of the vaccination date are categorized as 'Unknown'
9	Recipient sex	recip_sex	Recipient's sex.	HL7 User Defined table 0001 M (Male) F (Female) U (Unknown/undifferentiated)
10	Recipient address: street	recip_address_street	The street component of the recipient's address.	n/a
11	Recipient address: street 2	recip_address_street_2	The street 2 component of the recipient's address.	n/a
12	Recipient address: city	recip_address_city	The city component of the recipient's address.	n/a
13	Recipient address: county	recip_address_county	The county code component of the recipient's address.	FIPS Codes
14	Recipient County Name	recip_county_label	The county name component of the recipient's address.	Derived from FIPs based on County_Code. When recip_address_county is null, derived from recip_address_zip. See Recip_Address_County_New.

Field No.	COVID-19 Data Element	Variable Name	Data Element Description	Value Set
			'Outside California' category includes out-of-state residents and records where recipient's state of residence is blank.	
15	Recipient address: state	recip_address_state	The state component of the recipient's address.	US Postal Service two-character State Codes
16	Recipient address: zip code	recip_address_zip	The zip code of the recipient's address (5 digit or 10 digits, with hyphen, are acceptable).	n/a
17	Administration date	admin_date	The date the vaccination event occurred (or was intended to occur).	n/a
18	CVX	cvx	The vaccine type that was administered.	COVID-19 Vaccine Codes
19	NDC	ndc	The vaccine product that was administered: Unit of Use (UoU) is preferred if both UoU and Unit of Sale (UoS) are available.	NDC Crosswalk Tables
20	MVX	mvx	The manufacturer of the vaccine administered.	MVX – Manufacturers of Vaccines
21	Lot number	lot_number	The lot number of the vaccine administered: Unit of Use (UoU) is preferred if both UoU and Unit of Sale (UoS) are available.	n/a
22	Vaccine expiration date	vax_expiration	The expiration date of the vaccine administered.	n/a

Field No.	COVID-19 Data Element	Variable Name	Data Element Description	Value Set
23	Vaccine administering site	vax_admin_site	The body site of vaccine administration.	HL7 defined table 0163 LT (Left thigh) LA (left arm) LD (left deltoid) LG (left gluteus medius) LVL (left vastus lateralis) LLFA (left lower forearm) RT (right thigh) RA (right arm) RD (right deltoid) RG (right gluteus medius) RVL (right vastus lateralis) RLFA (right lower forearm)
24	Vaccine route of administration	vax_route	The route of vaccine administration (e.g., oral, subcutaneous).	HL7 defined table 0162 or FDA NCI Thesaurus (NCIT) NCIT values preferred and provided for reference C38238 (Intradermal) C28161 (Intramuscular) C38284 (Nasal) C38276 (Intravenous) C38288 (Oral) C38676 (Percutaneous) C38299 (Subcutaneous) C38305 (Transdermal)
25	Dose number	dose_num	Dose number in vaccination series, provided dose is considered valid (e.g., counts towards immunity).	Locally Defined Value Set: 1 (Valid first dose) 2 (Valid second dose) 3 (Valid third dose) INV (Invalid dose) UNK (Unknown validity)

Field No.	COVID-19 Data Element	Variable Name	Data Element Description	Value Set
26	Vaccination series complete	vax_series_complete	Report if the vaccination series is complete. Select "YES" when the recipient has completed the required doses for the specific vaccine product. If more doses are required select "NO." If unknown, or cannot be calculated, select "UNK."	Locally Defined Value Set: YES (Yes) NO (No) UNK (Unknown)
27	Responsible organization	responsible_org	The name of the parent organization or health system that originated and is accountable for the content of the record. If an organization has several clinics or facilities, this would be the organization that represents all of the clinics/facilities (the "Administered at location" field is the name of individual physical location).	n/a
28	Administered at location	admin_name	The name of the physical clinic or facility that reported the vaccination. In a small practice setting, this could be the same as the responsible organization.	n/a
29	VTrckS provider PIN	vtrcks_prov_pin	The 6-digit Provider PIN in VTrckS. For VFC Providers, this is the VFC PIN. This ID is being used for linking across data sources.	n/a

Field No.	COVID-19 Data Element	Variable Name	Data Element Description	Value Set
30	Administered at location: type	admin_type	The characteristic of the provider site that reported the vaccination, refusal, or missed appointment.	Locally Defined Value Set: 1 (Commercial vaccination service provider) 2 (Corrections/detention health services) 3 (Health center – community) 4 (Health center – migrant or refugee) 5 (Health center – occupational) 6 (Health center – STD/HIV clinic) 7 (Health center – student) 8 (Home health care provider) 9 (Hospital) 10 (Indian Health Service) 11 (Tribal health) 12 (Medical practice – family medicine) 13 (Medical practice – pediatrics) 14 (Medical practice – internal medicine) 15 (Medical practice – OB/GYN) 16 (Medical practice – other specialty) 17 (Pharmacy – chain) 18 (Pharmacy – independent) 19 (Public health provider – public health clinic) 20 (Public health provider – Federally Qualified Health Center) 21 (Public health provider – Rural Health Clinic) 22 (Long-term care – nursing home, skilled nursing facility, federally certified) 23 (Long-term care – nursing home, skilled nursing facility, non-federally certified) 24 (Long-term care – assisted living) 25 (Long-term care – intellectual or developmental disability) 26 (Long-term care – combination) 27 (Urgent care) 28 (Other) UNK (Unknown)

Field No.	COVID-19 Data Element	Variable Name	Data Element Description	Value Set
31	Administration address: street	admin_address_street	The street component of where the vaccine is administered/ planned to be administered. Exception for mobile clinics.	n/a
32	Administration address: street 2	admin_address_street_2	The street 2 component of where the vaccine is administered/planned to be administered. Exception for mobile clinics.	n/a
33	Administration address: city	admin_address_city	The city component of where the vaccine is administered/planned to be administered. Exception for mobile clinics.	n/a
34	Administration address: county	admin_address_county	The county component of the administration address.	FIPS Codes
35	Administration address: county name	admin_county_label	The county component of where the vaccine is being administered/planned to be administered. Exception for mobile clinics.	Join with FIPs table based on County_Code to get the county name
36	Administration address: state	admin_address_state	The state component of where the vaccine is administered/ planned to be administered. Exception for mobile clinics.	US Postal Service two-character state codes
37	Administration address: zip code	admin_address_zip	The zip code component of where the vaccine is administered/planned to be administered. Exception for mobile clinics.	n/a
38	Date Vaccine Entered into Registry	IIS_ADDED_DATE	The date vaccine reported to local registry.	n/a
39	Source IIS	source_iis	Name of IIS.	Locally Defined Value Set: CAIR2
40	Vaccine label	vax_label	Name of vaccine manufacturer.	Locally Defined Value Set: CVX 207, 221 = 'Moderna'

Field No.	COVID-19 Data Element	Variable Name	Data Element Description	Value Set
				CVX 208, 217 = 'Pfizer' CVX 212 = 'J&J' CVX 213 = 'COVID-19, Unspecified' CVX 218 = 'Pfizer Pediatric' CVX 219 = 'Pfizer Under 5' CVX 228 = 'Moderna Under 6'
41	Recipient race/ethnicity	recip_race_eth	Recipient's race/ethnicity.	When ethnicity is marked 'Hispanic or Latino' then 'Latino', when more than one specified race (1002-5, 2028-9, 2076-8, 2054-5, 2106-3) is noted then 'Multiracial', otherwise first race noted.
42	Recipient race 1	recip_race_1	Recipient's race.	HL7 User Defined table 0005 1002-5 (American Indian or Alaska Native) 2028-9 (Asian) 2076-8 (Native Hawaiian or Other Pacific Islander) 2054-5 (Black or African American) 2106-3 (White) 2131-1 (Other Race) UNK (Unknown) POL (Unable to report due to policy/law)
43	Recipient race 2	recip_race_2	Recipient's race. Fields recipient race 2-6 support recipients with more than 1 race. (Skip if only one race reported).	See Value Set in "Recipient Race 1" field
44	Recipient race 3	recip_race_3	Recipient's race. Fields recipient race 2-6 support recipients with more than 1 race. (Skip if only one race reported).	See Value Set in "Recipient Race 1" field
45	Recipient race 4	recip_race_4	Recipient's race. Fields recipient race 2-6 support recipients with more than 1 race. (Skip if only one race reported).	See Value Set in "Recipient Race 1" field
46	Recipient race 5	recip_race_5	Recipient's race. Fields recipient race 2-6 support recipients with more than 1 race. (Skip if only one race reported).	See Value Set in "Recipient Race 1" field
47	Recipient race 6	recip_race_6	Recipient's race. Fields recipient race 2-6 support recipients with more than 1 race. (Skip if only one race reported).	See Value Set in "Recipient Race 1" field
48	Recipient ethnicity	recip_ethnicity	The ancestry of the recipient.	HL7 User Defined table 0189 2135-2 (Hispanic or Latino) 2186-5 (Not Hispanic or Latino)

Field No.	COVID-19 Data Element	Variable Name	Data Element Description	Value Set
				PHC1175 (Prefer not to say) UNK (Unknown ethnicity) POL (Unable to report to do policy/law)
49	Recipient Address: county (New)	recip_address_county_new	If recipient county is blank, this field gets populated by the FIPS code of using the recipient ZipCode if available.	
50	Mixed zip	mixed_zip	If recipient zipcode is null, this field is populated by admin zip code.	
51	Mixed county	mixed_county	If Recip_Address_County_New is NULL or unknown, populated with admin_county_label. 'Outside California' category includes out-of-state residents and records where recipient's state of residence is blank.	
52	Recipient address: county based on zip code	HPI_COUNTY_RCP_ZIP	The county name of the recipient's address, derived from the zip code of the recipient's address.	County derived from recip_address_zip
53	Local health jurisdiction	LHJ	Local health jurisdiction of recipient's residence; if zip code (mixed_zip) is in Berkeley, Long Beach, or Pasadena cities, LHJ = Berkeley, Long Beach and Pasadena, respectively, otherwise LHJ = mixed_county. 'Outside California' category includes out-of-state residents and records where recipient's state of residence is blank.	when Mixed_ZIP in ('94701', '94702', '94703', '94704', '94705', '94707', '94708', '94709', '94710', '94712', '94720') then 'Berkeley' when Mixed_ZIP in ('90801', '90802', '90803', '90804', '90805', '90806', '90807', '90808', '90809', '90810', '90813', '90814', '90815', '90822', '90831', '90832', '90833', '90834', '90835', '90840', '90842', '90844', '90845', '90846', '90847', '90848', '90853', '90888', '90899') then 'Long Beach' when left(mixed_zip,5) in ('91101', '91102', '91103', '91104', '91105', '91106', '91107', '91109', '91110', '91114', '91115', '91116', '91117', '91121', '91123', '91124', '91125', '91126', '91129', '91131', '91182', '91184', '91185', '91188', '91189', '91191', '91199') then 'Pasadena' ELSE mixed_county

Field No.	COVID-19 Data Element	Variable Name	Data Element Description	Value Set
54	MCE	MCE	Provider affiliated with state agency multi-county entity, health system multi-county entity, or pharmacy entity participating in CDC Long Term Care or Retail Pharmacy Partnership programs.	Locally Defined Value Set: CDCR (State Agency MCE - CA Dept of Corrections and Rehabilitation) DHS (State Agency MCE - Dept of State Hospitals) AHMC Healthcare (Health System MCE) Dignity Health (Health System MCE) Kaiser Permanente (Health System MCE) Providence (Health System MCE) Sutter Health (Health System MCE) UC Health (Health System MCE) CVS (Pharmacy) Rite Aid (Pharmacy) Walgreens (Pharmacy) Albertson Companies, Inc. (Pharmacy) Costco (Pharmacy) Kroger (Pharmacy) Walmart (Pharmacy) Topco (Pharmacy) Good Neighbor (Pharmacy) Health Mart (Pharmacy) CPESN (Pharmacy) Cardinal (Pharmacy) GeriMed (Pharmacy) MHA (Pharmacy) Premier-Innovatix (Pharmacy)
55	ID	immun_fact_ID	Unique identifier for the immunization record.	
56	Email	email_address	Recipient's email.	
57	Phone number	phone_number	Recipient's phone number.	
58	Organization code	org_code	The CAIR2 or RIDE Organization Code assigned to administering organization.	
59	Snapshot time	SNAPSHOT_TIME	Data current as of this timestamp.	
60	Snowflake entered date	WAREHOUSE_ENTER_DATE	Date/time record created in Snowflake.	
61	Snowflake updated date	WAREHOUSE_UPDATE_DATE	Date/time record updated in Snowflake. Available for CAIR2 records only.	

Field No.	COVID-19 Data Element	Variable Name	Data Element Description	Value Set
62	CAIR2 updated Date	CAIR_UPDATE_TS	Date/time record updated in CAIR2. Available for CAIR2 records only.	
63	Recipient vaccination number	RECIP_VAX_NUM	Dose number in vaccination series, incremented by 1 for each dose received by the recipient, in order of vaccination date. All doses received by each recipient, including invalid doses, are assigned a number. May differ from dose number assigned by IIS.	
64	Bridge recipient ID	BRIDGE_RECIP_ID	<p>Recipient ID used for this individual in the recipient level view.</p> <p>When an individual is identified as having more than one recipient ID in the dataset using the below bridging logic, all doses for that individual are mapped under one of the recipient IDs in the recipient level view. The recipient ID that is selected will be denoted as BRIDGE_RECIP_ID. In the recipient level view, RECIP_ID field reflects BRIDGE_RECIP_ID.</p> <p>Bridging logic:</p> <ul style="list-style-type: none"> • Same first name AND • Same last name AND • Same DOB AND <p>One of the following:</p> <ul style="list-style-type: none"> - (Address street similar (50% max difference) OR both address street is blank) AND same ZIP code - Same admin date and same lot number - Same phone number - Same email address 	
65	Additional dose flag	IS_ADDITIONAL_DOSE_AND_24_DAYS	Additional dose administered at least 24 days after series completion (Pfizer recipients 5+ years of age, Moderna and J&J recipients 18+ years of age).	0 (FALSE) 1 (TRUE)

Field No.	COVID-19 Data Element	Variable Name	Data Element Description	Value Set
			Includes any dose that was administered at least 24 days after series completion (2 mRNA or 1 J&J). Includes both additional doses and booster doses.	
66	Historical dose	HISTORICAL_IND	Vaccination entered as an administered or historical dose. Available for CAIR2 records only.	00 (Administered) 01 (Historical)
67	Additional dose flag – 52 day interval	IS_ADDITIONAL_DOSE_AND_52_DAYS	Additional dose administered at least 52 days after series completion.	0 (FALSE) 1 (TRUE)
68	Patient sharing indicator	LOCKED_IND	Patient sharing status. If 1, patient has requested that their record not be shared with organizations other than their own provider or public health.	0 (FALSE) 1 (TRUE)
69	Booster dose flag - bivalent	BIVALENT_BOOSTER	Age 6 months-5: 3 rd dose – Moderna pediatric bivalent booster at least 52 days after 2 nd dose (Moderna Under 6) Age 5+: 3 rd dose (updated booster) - Pfizer pediatric bivalent booster at least 52 days after 2 nd dose (Pfizer Pediatric/Moderna Under 6) Age group 6-11: 3 rd dose (updated booster) - Pfizer Pediatric/Moderna bivalent booster at least 52 days after 2 nd dose (Pfizer Pediatric/Moderna) Age 12+: 3 rd dose (updated booster) - Pfizer/Moderna bivalent booster at least 52 days after 2 nd dose (Pfizer/Moderna/Novavax) or last monovalent booster (Pfizer/Moderna) Age 18+: 2 nd dose (updated booster) - Pfizer/Moderna bivalent booster at least 52 days after 1 st dose (J&J) or last monovalent booster (Pfizer/Moderna)	0 (FALSE) 1 (TRUE)
70	Census tract – recipient address (2020)	CENSUS_TRACT	2020 census tract based on recipient address only.	

Field No.	COVID-19 Data Element	Variable Name	Data Element Description	Value Set
71	Census tract – recipient address (2010)	CENSUS_TRACT_10	2010 census tract based on recipient address only.	
72	Census tract – administration address	CENSUS_TRACT_ADMIN_10	2010 census tract based on vaccinating provider’s address only.	
73	HPI 3.0 - census tract	HPI_3_TRACT	Healthy Places Index 3.0 score quartile based on the 2010 census tract from the recipient’s address.	Healthy Places Index Locally Defined Value Set: 1 (HPI Quartile 1) 2 (HPI Quartile 2) 3 (HPI Quartile 3) 4 (HPI Quartile 4) Null (no HPI score assigned)
74	HPI 3.0 – zip	HPI_3_ZIP	Healthy Places Index 3.0 score quartile based on the recipient’s address zip (if null, uses the ZCTA zip from the zip-to-ZCTA crosswalk); if recipient’s address zip is still null, uses the vaccinating provider’s address zip (if provider’s address zip is null, uses the ZCTA from the zip-to-ZCTA crosswalk).	Healthy Places Index Locally Defined Value Set: 1 (HPI Quartile 1) 2 (HPI Quartile 2) 3 (HPI Quartile 3) 4 (HPI Quartile 4) Null (no HPI score assigned)
75	HPI 3.0 - mixed	HPI_3_MIXED	HPI_3_TRACT; if null, uses HPI_3_ZIP.	Healthy Places Index Locally Defined Value Set: 1 (HPI Quartile 1) 2 (HPI Quartile 2) 3 (HPI Quartile 3) 4 (HPI Quartile 4) Null (no HPI score assigned)
76	Recipient address: county based on HPI_3_MIXED	HPI_COUNTY_RCP_MIXED	The county name of the recipient’s address, derived from HPI_3_MIXED.	

Field No.	COVID-19 Data Element	Variable Name	Data Element Description	Value Set
77	Recipient address: concatenated	MIXED_ADDRESS	Concatenation of the recipient address street, city, state, and zip code.	
78	Administration address: concatenated	MIXED_ADMIN_ADDRESS	Concatenation of the vaccinating provider's address street, city, state, and zip code.	
79	Recipient vaccination number excluding CVX 213	RECIP_VAX_NUM_MINUS213	Dose number in vaccination series, incremented by 1 for each dose received by the recipient, in order of vaccination date, excluding CVX 213 (unspecified product). All doses received by each recipient, including invalid doses, are assigned a number. May differ from dose number assigned by IIS.	