

Data Exchange Interface (DEI)

Providers, health plans, and authorized agencies may submit DEI files to the CIR for the purpose of obtaining in batches immunization information about children and adolescents, currently under their care, that are vaccinated in New York City. Please note that children and adolescents that are vaccinated by health care providers outside of New York City are not likely to have immunization information recorded in the CIR.

Specifications

I. Input file

- ◆ The DEI input is a variable-length, ASCII file with a <cr><lf> at the end of each record.
- ◆ The file contains the following header fields, each on its own line. The data follows the file label with the actual value inserted:

Field Description	File Label
Subscriber ID assigned by DOH	XVAR:subscriber: <i>value</i>
Input File Creation Date	XVAR:input-date: <i>value</i>
Subscriber Contact Information (name, telephone, e-mail address)	XVAR:contact: <i>value</i>

For example, this header might appear as:

```
XVAR:subscriber:DOH121
XVAR:input-date:3/10/2000
XVAR:contact:Dr. John Smith, 212/555-1212, smith@smith&jones.com
```

- ◆ The data file contains a single line with the field names from the following table. **Child's gender, date of birth, first name and last name are required fields. Please include any of the additional fields shown below if it is available to you.** For children who have been previously processed through Data Exchange Interface for Medicaid Managed Care Matching Project or other projects, **please make sure to include their CIR numbers from the output file we returned to you.** This information is essential when we search for these children in the CIR and helps increase the likelihood of finding a match in the CIR. The field names should be separated by commas:

Field Name	Description/Notes
cir	Cir # of the child (if known)
medicaid	Medicaid ID of the child (if applicable)
medrec	Medical record number of the child
gender	Gender of the child (M or F)
dob	Child's DOB. Please use a four-digit year (mm/dd/yyyy format). If a two-digit year is used, 00 is interpreted as 2000, 01-99 as 1901-1999.
fname	Child's first name
lname	Child's last name (no suffixes, please)
mname	Child's middle name

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address	House# + Street + Apt#
city	City
zip	5 digit number only
phone	Child's or parent/guardian's phone # with area code
momdob	Mother's date of birth. Please use a four-digit year (mm/dd/yyyy format). If a two-digit year is used, 00 is interpreted as 2000, 01-99 as 1901-1999.
mommname	Mother's maiden name
comment	Subscriber is allowed the option of submitting a text comment that will be passed through the process and appear in the output file.

For example, this line might appear in the file as

```
cir,medicaid,medrec,gender,dob,fname,lname,mname,address,city,zip,phone,
momdob,mommname,comment
```

```
123679001,KA66666A,12340,M,2/1/2001,Peter,Pan,Green,2 Disney Lane Apt
2C,Brooklyn,11222,212-676-2323,2/1/1980,World, 123
```

The actual input data follow the field names, one line for each child. The data must appear in the same order as the fields in the field name list above. If a particular field is missing from a record substitute a blank space but account for the field so that all records have the same number of fields (and therefore the same number of commas).

II. Data Output File

- ◆ The DEI output is a variable-length, ASCII file with a <cr><lf> at the end of each record.
- ◆ The file contains the following header fields, each on its own line, which were provided in the DEI input file:

Field Description	File Label
Subscriber ID assigned by DOH	XVAR:subscriber: <i>value</i>
Input File Creation Date	XVAR:input-date: <i>value</i>
Subscriber Contact Information (name, telephone, e-mail address)	XVAR:contact: <i>value</i>

For example, this header might appear as:

XVAR:subscriber:DOH121

XVAR:input-date:3/10/2000

XVAR:contact:Dr. John Smith, 212/555-1212, smith@smith&jones.com

- ◆ The file then contains a single line with the field names (described in detail in the table below). The field names are separated by a comma.

Field Name	Description/Notes
seqnum	Sequence number of records
medrec	Medical record number of the child if provided in the input file
cir	CIR# of the child from the Citywide Immunization Registry database (blank if no match)
utd	Up-to-date for age (series considered are HepB, DTaP, Hib, Polio, MMR, Varicella, and Pneumococcal). Yes (Y), No (N), and Not Found (NF) in CIR.
medicaid	Medicaid ID of the child if provided in the input file
gender	Gender of the child (M or F) as provided in the input file
dob	Child's DOB as provided in the input file
fname	Child's first name as provided in the input file
lname	Child's last name as provided in the input file
mname	Child's middle name as provided in the input file
momdob	Mother's date of birth if provided in the input file
momname	Mother's maiden name if provided in the input file
comment	Subscriber comment if provided in the input file.

- ◆ The actual output data follows the field names, one line for each child. The data will appear in the same order as the fields in the field name list above. If the value of a particular field is missing from a record, the field will still be present with a blank space between the commas.
- ◆ The following **six (6)** fields will then appear within the same record as the one above. Each set of 6 fields will describe an immunization given according to the CIR. Each set **will repeat for each immunization**:

Field Name	Description/Notes
izseries	The immunization series name (DTP, HepB etc.)
izhl7vac	The HL7 vaccine name (see attached <i>HL7 Vaccine Code Table</i> for descriptions)
izdate	The immunization date (mm/dd/yyyy format)
izcombo	Y for yes, if the immunization was administered as part of a combination vaccine. Otherwise the field will be blank.
izcomment	The immunization scheduler comment code, if applicable (see attached <i>Comment Table</i> for descriptions)
izstat	This field will be empty

- ◆ At the end of each set of immunizations given within a series, six (6) additional fields will appear but this time they indicate the recommendation status of that series. These appear as follows:

Field Name	Description/Notes
izseries	Immunization series name followed by the suffix REC – indicating that what follows is the recommendation for the series (e.g. HepBREC, DTPREC, etc.).
izhl7vac	The HL7 vaccine name (see attached <i>HL7 Vaccine Code Table</i> for descriptions) of the next recommended immunization will appear. If the series is complete this field will be empty.
izdate	This field will be empty
izcombo	This field will be empty
izcomment	This field will be empty
izstat	The recommendation status code for the series* (see attached <i>Recommendation Status Table</i> for descriptions). If the child is up-to date for that series, then there will be no recommendation.

III. Not-UTD Output File (if provided): This file contains a list of children who are not UTD based on the CIR, together with the series that is due. Furthermore, 5 common immunization pitfalls are listed, and a Y/N value indicates whether that pitfall was present for each child not UTD on the list.

- ◆ The DEI not-UTD output is a variable-length, ASCII file with a <cr><lf> at the end of each record.
- ◆ The file contains a single line with the field names (described in detail in the table below). The field names are separated by tab delimited.

Field Name	Description/Notes
seqnum	Sequence number of records
cir	CIR# of the child from the Citywide Immunization Registry database
lastname	Child's last name as provided in the input file
firstname	Child's first name as provided in the input file
dob	Child's DOB as provided in the input file
gender	Gender of the child (M or F) as provided in the input file
medrec	Medical record number of the child if provided in the input file
valid_imms	Total number of age-specific valid immunizations as calculated by our forecasting/validation algorithm
series_due	Antigen series and dose number due at the time report was run*; series due are separated by a comma
mmr_prior_age1	MMR date was prior to age 1; N for No and Y for Yes.
varicella_prior_age1	Varicella date was prior to age 1; N for No and Y for Yes.
mmr_var_28_days	MMR and Varicella dates were within < 28 days of each other; N for No and Y for Yes.
third_hepb_before_6mos	Third hepB date was prior to six months of age; N for No, Y for Yes.
dtp_3_4_gap	The interval between third and fourth dose of DTaP was less than 6 months; N for No and Y for Yes.
comment	Subscriber comment if provided in the input file.

* = antigen shown may have been given after the report was run or was not reported to the CIR by the provider



HL7 Vaccine Code Table

(Please visit the CDC website for updates on codes:

<http://www2a.cdc.gov/vaccines/IIS/IISStandards/vaccines.asp?rpt=cvx>)

HL7 VACCINE CODE, NAME

- 01, DTP
- 02, OPV
- 03, MMR
- 04, Measles and Rubella
- 05, Measles
- 06, Rubella
- 07, Mumps
- 08, HepB
- 09, Td
- 10, IPV
- 11, Pertussis
- 12, Diphtheria Antitoxin
- 13, TIG
- 14, IG
- 15, Influenza-injectable (incl. purified surface antigen)
- 16, Influenza-whole
- 17, Hib-unspecified
- 18, Rabies-intramuscular injection
- 19, BCG
- 20, DTaP
- 21, Varicella
- 22, DTP-Hib
- 23, Plague
- 24, Anthrax
- 25, Typhoid-oral
- 26, Cholera
- 27, Botulinum Antitoxin
- 28, DT
- 29, CMVIG
- 30, HBIG
- 31, HepA-pediatric
- 32, Meningococcal polysaccharide
- 33, Pneumococcal polysaccharide
- 34, RIG
- 35, Tetanus Toxoid
- 36, VZIG
- 37, Yellow Fever
- 38, Rubella/Mumps
- 39, Japanese Encephalitis
- 40, Rabies-intradermal injection
- 41, Typhoid-parenteral
- 42, HepB-high risk infant
- 43, HepB-adult
- 44, HepB, dialysis
- 45, HepB, other or NOS
- 46, Hib (PRP-D)
- 47, Hib (HbOC)



HL7 Vaccine Code Table continued

- 48, Hib (PRP-T)
- 49, Hib (PRP-OMP)
- 50, DTaP-Hib
- 51, Hib-HepB
- 52, HepA, adult
- 62, HPV, quadrivalent
- 66, Lyme disease
- 71, RSV-IGIV
- 74, Rotavirus, Tetravalent, Live, Oral
- 75, Vaccinia (smallpox)
- 79, Vaccinia immune globulin
- 83, HepA-pediatric/adolescent (2 dose)
- 84, HepA-pediatric/adolescent (3 dose)
- 86, IG, immune globulin, intramuscular
- 87, IGIV, immune globulin, intravenous
- 88, Influenza, NOS
- 89, Polio-unspecified
- 91, Typhoid-unspecified
- 93, RSV-MAb
- 94, Measles, Mumps, Rubella, Varicella
- 100, Pneumococcal conjugate
- 101, Typhoid, typhoid Vi capsular polysaccharide vaccine
- 103, Meningococcal C conjugate
- 104, Hep A-Hep B
- 106, DTaP, 5 pertussis antigens
- 107, DTaP, NOS
- 108, Meningococcal, NOS
- 109, Pneumococcal, NOS
- 110, DTaP-HepB-IPV
- 111, Influenza, live, intranasal
- 113, Tetanus and diphtheria toxoids, adsorbed, preservative free
- 114, MCV4P, Meningococcal polysaccharide
- 115, Tdap, adsorbed
- 116, Rotavirus, pentavalent, live, oral, 3 dose schedule
- 118, HPV, bivalent
- 119, Rotavirus, monovalent, live, 2 dose schedule
- 120, DTaP-Hib-IPV
- 121, Zoster, live
- 122, Rotavirus, NOS
- 125, H1N1, live nasal
- 126, H1N1, injectable-preservative free
- 127, H1N1, injectable
- 128, H1N1, all formulations of influenza
- 130, DTaP-IPV
- 133, PCV-13, pneumococcal conjugate vaccine, 13 valent
- 135, Influenza virus vaccine, split virus, preservative free, enhanced immunogenicity via increased antigen content, for intramuscular use, for use in individuals ≥ 65 years old.
- 136, meningococcal oligosaccharide (A, C, Y, W-135) diphtheria toxoid conjugate vaccine vaccine (MCV40; 2mo-55 yrs.), for intramuscular use
- 137, HPV, unspecified formulation
- 138, Td (adult) not absorbed
- 139, Td (adult) unspecified formulation



HL7 Vaccine Code Table continued

- 140, Influenza,seasonal, injectable,preservative free, split virus, for children 6-35 months of age, for intramuscular use, and for use in individuals 3 years of age and above
- 141, Influenza,seasonal, injectable, split virus, for use in individuals >=3 years old, for intramuscular use
- 142, Tetanus toxoid, not adsorbed
- 143, Adenovirus type 4 and 7
- 144, Influenza, IIV3, ID, (18-64yrs)
- 147, MCV4, unspecified formulation
- 148, Meningococcal CYY-Hib PRP
- 149, Influenza-LAIV4, IN, (2-49yrs)
- 150, Influenza-IIV4, IM, Presrv-free (>=3yrs)
- 151, Influenza-intranasal NOS
- 152, Pneum Conj NOS
- 153, Influenza-ccIIV3, IM, (>=18yrs)
- 155, Influenza-RIV3, IM, (18-64yrs)
- 156, Rho (D) IG NOS
- 157, Rho (D) IG IM
- 158, Influenza-IIV4, IM (>=3yrs)
- 159, Rho (D) IG IV or IM
- 161, Influenza-IIV4,IM Presrv-free (6-35mos)

ICD-9, Disease/Immunity Type

- 070.1 Hepatitis A
- 070.30 Hepatitis B
- 052.9 Varicella
- 055.9 Measles
- 072.9 Mumps
- 056.9 Rubella

Comment Table

Izcomment - COMMENT, DESCRIPTION

- 1001 The age of this patient was below the recommended minimum age of the vaccine.
- 1002 This immunization event occurred prior to the recommended age or recommended interval for this dose.
- 1003 This immunization event occurred prior to the recommended age or recommended interval for this dose.
- 1004 This immunization event occurred prior to the recommended age or recommended interval for this dose.
- 1005 This immunization event occurred prior to the recommended age or recommended interval for this dose.
- 1006 The current immunization schedule does not support this vaccine, series and dose number combination.
- 1007 The age of this patient exceeds the max age of the series based on the current immunization schedule.
- 1008 The system only evaluates events which were administered when the patient was under 8 years old.
- 1009 This immunization event was an extra dose since it occurred after this series was completed.
- 1010 The system was unable to produce a recommendation based on the immunization history of this patient.
- 1011 The system was unable to process this event due to the structure of the current immunization schedule.
- 1012 The immunization event occurred less than 28 days after the administration of another live virus vaccine.
- 1013 This vaccine series is not applicable based on the date of birth of this patient.
- 1014 The vaccine season has passed.
- 1015 The vaccine has already been given as many times as allowed during this season.
- 1016 This vaccine is not currently licensed for this age.
- 1017 This vaccine is currently licensed only for use in females.
- 1018 Before Vaccine Min Age.



Comment Table continued

- 1019 Past Vaccine Max Age.
- 1020 DTaP-Hib not accepted unless final dose in series, and other rules are followed.
- 1021 Event rejected, Tdap previously accepted.
- 1022 This vaccine is licensed for a single dose only.

Recommendation Status Table

Izstat - REC_STATUS, PROVIDER_DESC

- 8, Not generally recommended
- A, Over maximum age for series
- C, Completed Vaccine Series
- D, Not Generally Recommended
- I, Not Generally Recommended
- L, Recommended for high risk groups
- N, Not Available
- O, Ongoing (due now)
- P, Contact the CIR for Assistance
- R, Requires Calculation
- S, Contact the CIR for Assistance
- X, Not recommended