

**Attachment 1E.**

**Varicella Notification Message**

**Mapping Guide 06052007.xls**

# Attachment 1E

## Varicella Notification Message Mapping Guide

**VERSION: The version of this Message Mapping Guide is Draft 0.6 dated 6/5/2007.**

This Message Mapping Guide describes the content and message mapping specifications for the fixed set of data elements used to communicate information to meet the requirements for Varicella Individual Case reporting to CDC. The intended audience for this document are the state/local and CDC programs and other public health related organizations interested in using the HL7 V2.5 case notification message specification for transmitting their data elements.

### References

Version 1.0 of the *Message Specification Guide* is used to inform the mapping methodology for this guide.

*Notify CDC Message-All PAMs* from NEDSS PAM Platform Team. Last updated 1/26/2007.

*NEDSS PAM Platform Help Guide*, 11/30/2006.

### Understanding the Organization of the Mapping Guide

<u>Revisions</u>	This tab is intended to provide revision control for updates made to the document.
<u>Key</u>	Key to columns in each Tab/Worksheet
<u>Subject-related</u>	This tab provides the mapping methodology for the demographic variables requested by the program.
<u>Generic Obs.</u>	This tab provides the content for the generic investigation questions. The ones that are not used for this particular instance are greyed out.
<u>Varicella Observations</u>	This tab provides the mapping methodology for the case/investigation content requested by the program for this specific notification.
<u>Varicella Lab Report</u>	This tab provides the mapping methodology for the content specific to a Varicella associated laboratory report.
<u>Notification Structure</u>	This tab provides the structural elements for the Notification. These variables are not negotiable. Default values are provided for HL7 structural elements that are required but not part of the surveillance data requested.

### Variables as Observations

Other than the variables that map to the Patient Identifier segment (see Subject-Specific tab), all other variables are passed as a series of OBX-Observation/Result segments that are logically tied to the OBR-Observation Request "section header" segment that immediately precedes it. This content presents the real differences between the messages since all types of Notifications are handled in a standard manner up to this point.

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### Revisions

Date	Version	Description
4/20/2007	Draft v. 0.5	Now using the Value Set Name when referencing a value set, rather than using the Value Set Code. This aligns with what PHIN-VADS displays upon look up.
4/20/2007	Draft v. 0.5	Added "notification subject type" to the OBR-Notification structural data to bring the message structure in line with the Outbreak Management version of the ORU Case Investigation Report message.
4/20/2007	Draft v. 0.5	Changed all observations that use the CE value type in OBX-2 to CWE - coded with exception - to prepare for versioning of value sets. The additional fields are still optional at this point.
4/24/2007	Draft v. 0.5	Added "patient name type" to the Subject-specific data to account for the default value that must be provided in the message.
4/24/2007	Draft v. 0.5	Mapping change from PID-23 Birth Place attribute to using DEM126 to create an observation for Birth Country. Needed to be able to support country codes, whereas the PID-23 Birth Place attribute is "string".
4/24/2007	Draft v. 0.5	Mapping change from DEM128 Deceased Date on the patient record to INV146 Date of Death collected as part of the investigation.
4/24/2007	Draft v. 0.5	No longer supporting the RE - required but may be empty concept. The Program Optional/Required column reflects what the source messaging document specifies.
4/24/2007	Draft v. 0.5	Removed NOT110 Record Type variable. This observation is no longer necessary as the Notification Type specified in NOT101 contains this information.
4/24/2007	Draft v. 0.5	Broke out the supplemental notification data from the Notification Type (NOT101). Created NOT098 Supplemental Notification Type to designate that associated laboratory or vaccine report information is being passed with the notification.
5/9/2007	Draft v. 0.6	"Sent to CDC for Genotyping" concept remapped from VAR161 to LAB508
5/9/2007	Draft v. 0.6	"Genotyping Sent Date" concept remapped from VAR162 to LAB509
5/9/2007	Draft v. 0.6	"Sent For Strain ID" concept remapped from VAR163 to LAB510
5/9/2007	Draft v. 0.6	"Strain Type" concept remapped from VAR164 to LAB511
6/5/2007	Draft v. 0.6	Created a Generic Observations tab and greyed out any generic surveillance questions that Varicella does not use. Only the Varicella-specific observations remain on the Varicella Observations tab.

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## Varicella Notification Message Mapping Guide

### Key

Column	Description
<b>Program Variables Section</b>	
PHIN Variable ID	PHIN element UID drawn from the coding system PH_PHINQuestions_CDC
Label	Short name for the data element, which is passed in the message.
Description	Description of the data element as in PHIN Questions.
Data Type	Data type for the variable response expected by the program area
Prog. Req/Opt	Indicator whether the program specifies the field as: <b>R</b> - Required - mandatory for sending the message <b>O</b> - Optional - if the data is available it should be passed
May Repeat	Indicator whether the response to the data element may repeat. "Yes" in the field indicates that it may; otherwise, the field is not populated. Repeats require special processing.
Coded Concepts	Concepts that the program uses in answer to a particular question that required a coded response.
Value Set Name	Name of the pre-coordinated value set from which the response is drawn. The value sets and coding systems are accessible via the Public Health Information Network Vocabulary Access and Distribution Services at <a href="http://www.cdc.gov/PhinVSBrowser/StrutsController.do">http://www.cdc.gov/PhinVSBrowser/StrutsController.do</a> .
Data Validation	Business rules used for validating data integrity
<b>Message Mapping Methodology Section</b>	
Message Context	Specific HL7 segment and field mapping for the element.
HL7 Data Type	HL7 data type used by PHIN to express the variable.
HL7 Usage	Use of the field for PHIN. Indicates if the field is required, optional, or conditional in a segment. The only values that appear in the Message Mapping are: <ul style="list-style-type: none"> <li>• R – Required. Must always be populated</li> <li>• O – Optional. May optionally be populated.</li> </ul>
HL7 Cardinality	Indicator of the minimum and maximum number of times the element may appear. <ul style="list-style-type: none"> <li>• [0..0] Element never present.</li> <li>• [0..1] Element may be omitted and it can have at most, one Occurrence.</li> <li>• [1..1] Element must have exactly one Occurrence.</li> <li>• [0..n] Element may be omitted or may repeat up to n times.</li> <li>• [1..n] Element must appear at least once, and may repeat up to n times.</li> <li>• [0..*] Element may be omitted or repeat for an unlimited number of times.</li> <li>• [1..*] Element must appear at least once, and may repeat unlimited number of times.</li> <li>• [m..n] Element must appear at least m, and at most, n times.</li> </ul>
Implementation Notes	Related implementation comments.

Subject/Demographic Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
DEM115	Birth Date	Reported date of birth of patient.	Date	O					PID-7 Date/Time of Birth (does not pass Variable ID or label)	TS	O	[0..1]	
DEM113	Patient's sex	Patient's current sex.	Code	O		Male Female Unknown	Sex (MFU)		PID-8 Administrative Sex (does not pass Variable ID or label)	IS	O	[0..1]	
DEM152	Race Category	Field containing one or more codes that broadly refer to the patient's race(s).	Code	O	Y	American Indian or Alaska Native Asian Black or African American Native Hawaiian or Other Pacific Islander White Other Race	Race Category		PID-10 Race (does not pass Variable ID or label)	CE	O	[0..*]	
DEM165	Patient Address County	County of residence of the subject.	Code	O			County		PID-11.9 Patient Address - County	IS	O	[0..*]	
DEM162	Patient Address State	Patient's address state.	Text	O			State		PID-11.4 Patient Address - State	ST	O	[0..*]	
DEM163	Patient Address Zip Code	Patient's address Zip code.	Text	O					PID-11.5 Patient Address - Postal Code	ST	O	[0..*]	
DEM155	Ethnic Group Code	Ethnic origin or ethnicity is based on the individual's self-identity of the patient as Hispanic or Latino; choose one value from the list.	Code	O		Hispanic Non-hispanic	Ethnicity Group		PID-22 Ethnic Group (does not pass Variable ID or label)	CE	O	[0..1]	
DEM126	Birth Country	Patient's country of birth.	Code	O			Country		Observation/OBX Segment with this UID and label under the Patient Subject section header in OBR-4.	CWE	O	[0..1]	

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The generic surveillance elements that are not used for Varicella are shaded.

Generic Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
NOT109	Reporting State	State reporting the notification.	Coded	R		Standard 2-digit State FIPS code	State		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
NOT113	Reporting County	County reporting the notification.	Code	R					Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV169	Condition Code	Condition or event that constitutes the reason the notification is being sent.	Coded	R			Nationally Notifiable Infectious Disease (NND)	must be 10030 Varicella (Chickenpox)	(note that this is a Notification structural element, so it appears twice in this Guide)	CE	O	[0..1]	
INV168	Record ID	Unique Case Report ID (numeric only) assigned by the state.	Number	R					see Notification Structure tab - required data element	EI	R	[1..1]	
INV172	Local Case ID	Official local (city/county) identification number for the case	Text	O					Observation/OBX Segment with this UID and label	ST	O	[0..1]	
INV173	State Case ID	Official state identification number for the case; used by the state and the CDC to identify the case in communications.	Text	R					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	
INV107	Jurisdiction Code	Identifier for the physical site from which the notification is being submitted.	Code	R		state-assigned jurisdiction codes			Observation/OBX Segment with this variable ID and label	IS	O	[0..1]	
INV108	Case Program Area Code	The organizational ownership of the investigation. Program areas (e.g., Immunization, STD) are defined at the state level by the conditions for which they provide primary prevention and control.	Code	O		state-assigned			Observation/OBX Segment with this variable ID and label	IS	O	[0..1]	
INV109	Case Investigation Status Code	Status of the investigation. For example, <i>open</i> or <i>closed</i> .	Code	O		Open Closed			Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	

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PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV2006	Case Close Date	Date the case investigation status was marked as Closed.	Date	O				If the user enters the Date Closed for a case then the date must be >= Date Opened	Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV110	Investigation Date Assigned	Date the investigator was assigned to this investigation.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV111	Date of Report	Date the event or illness was first reported by the reporting source	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV112	Reporting Source Type Code	Type of facility or provider associated with the source of information sent to Public Health.	Code	O			Reporting Source Type NND		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV114	Reporting Source Name	Name of the provider reporting the case (typically the patient's primary care provider)	Text	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	
INV115a	Reporting Source Address Line 1	Reporting source street address Line 1	Text	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	
INV115b	Reporting Source Address Line 2	Reporting source street address Line 2	Text	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	
INV116	Reporting Source Address City	Reporting source address city	Code	O			City		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV117	Reporting Source Address State	Reporting source address state	Code	O			State		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV118	Reporting Source Zip Code	Zip Code of the reporting source for this case.	Alphanumeric	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	

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PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV119	Reporting Source Address County	Reporting source address county	Code	O			County		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV120	Earliest Date Reported to County	Earliest date reported to county public health system	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV121	Earliest Date Reported to State	Earliest date reported to state public health system	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV122	Reporting Source Telephone Number	Reporting source telephone number	Text	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	
INV128	Hospitalized	Was patient hospitalized because of this event?	Code	O		Yes No Unknown	Yes No Unknown (YNU)	1) If the patient was hospitalized for this illness, then enable entry of admission date 2) If the patient was hospitalized for this illness, then enable entry of discharge date 3) If the patient was hospitalized for this illness, then enable entry of total duration of stay in the hospital in days 4) If the patient was hospitalized for this illness, then enable entry of hospital information	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV129	Hospital Name	Name of the healthcare facility in which the subject was hospitalized.	Text	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	



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PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV132	Admission Date	Subject's admission date to the hospital for the condition covered by the investigation.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV133	Discharge Date	Subject's discharge date from the hospital for the condition covered by the investigation.	Date	O				If the user enters the Discharge Date, then the date must be >= Admission Date	Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV134	Duration of hospital stay in days	Subject's duration of stay at the hospital for the condition covered by the investigation.	Numeric	O					Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	
INV136	Diagnosis Date	Date of diagnosis of condition being reported to public health system	Date	O				1) If the user enters the Diagnosis Date, then the date must be >= Illness Onset Date 2) If the user enters the Diagnosis Date, then the date must be >= Rash Onset Date	Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV137	Date of Illness Onset	Date of the beginning of the illness. Reported date of the onset of symptoms of the condition being reported to the public health system	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV138	Illness End Date	Time at which the disease or condition ends.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV139	Illness Duration	Length of time this person had this disease or condition.	Numeric	O					Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	
INV140	Illness Duration Units	Unit of time used to describe the length of the illness or condition.	Code	O			Duration Unit (UCUM)		Observation/OBX Segment with this variable ID and label	CE	O	[0..1]	
INV143	Illness Onset Age	Age at onset of illness	Numeric	O				age units required	Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	

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PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV144	Illness Onset Age Units	Age units at onset of illness	Code	O		Days Months Weeks Years	Age Unit		uses INV143 observation - maps to <i>OBX-6-Units</i> (does not use INV144 ID or label)	CWE	O	[0..1]	
INV145	Did the patient die from this illness	Did the patient die from this illness or complications of this illness?	Code	O		Yes No Unknown	Yes No Unknown (YNU)	1) If the patient died from varicella or complications (including secondary infection) associated with varicella, then enable entry of date of death (INV146) 2) If the patient died from varicella or complications (including secondary infection) associated with varicella, then enable entry of if autopsy was performed (VAR143) 3) If the patient died from varicella or complications (including secondary infection) associated with varicella, then enable entry of cause of death (VAR144)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV146	Date of death	The date and time the subject's death occurred.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	re-mapped from DEM128
INV147	Investigation Start Date	The date the case investigation was initiated.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	

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PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV150	Case outbreak indicator	Denotes whether the reported case was associated with an identified outbreak.	Code	O		Yes No Unknown	If this case is part of an outbreak of 5 or more cases, then enable entry of outbreak name (INV151)	Yes No Unknown (YNU)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV151	Case Outbreak Name	A state-assigned name for an identified outbreak.	Code	O		state-assigned code			Observation/OBX Segment with this variable ID and label	IS	O	[0..1]	
INV152	Case Disease Imported Code	Indication of where the disease/condition was likely acquired.	Code			Indigenous Out of country Out of jurisdiction Out of state Unknown	Disease Acquired Jurisdiction		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV153	Imported Country	If the disease or condition was imported, indicates the country in which the disease was likely acquired.	Code	O			Country	if INV152 = Out of Country	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV154	Imported State	If the disease or condition was imported, indicates the state in which the disease was likely acquired.	Code	O			State	if INV152 = Out of State	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV155	Imported City	If the disease or condition was imported, indicates the city in which the disease was likely acquired.	Code	O			City	if INV152 = Out of Jurisdiction	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV156	Imported County	If the disease or condition was imported, contains the county of origin of the disease or condition.	Code	O			County	if INV152 = Out of Jurisdiction	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	

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Generic Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV157	Transmission Mode	Code for the mechanism by which disease or condition was acquired by the subject of the investigation. Includes sexually transmitted, airborne, bloodborne, vectorborne, foodborne, zoonotic, nosocomial, mechanical, dermal, congenital, environmental exposure, indeterminate.	Code	O			Case Transmission Mode		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV159	Detection Method	Code for the method by which the public health department was made aware of the case. Includes provider report, patient self-referral, laboratory report, case or outbreak investigation, contact investigation, active surveillance, routine physical, prenatal testing, perinatal testing, prison entry screening, occupational disease surveillance, medical record review, etc.	Code	O			Case Detection Method		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	Note required by program
INV161	Confirmation Method	Code for the mechanism by which the case was classified, providing information about how the case classification status was derived. More than one confirmation method may be indicated.	Code	O	Y		Case Confirmation Method		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV162	Confirmation Date	If an investigation is confirmed as a case, the confirmation date is entered.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	

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Generic Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV163	Case Class Status Code	Status of the case/event as suspect, probable, confirmed, or "not a case" per CSTE/CDC/ surveillance case definitions.	Code	R		Confirmed Not a Case Probable Suspect	Case Class Status		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV165	MMWR Week	MMWR Week for which case information is to be counted for MMWR publication.	Numeric	R					Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	
INV166	MMWR Year	MMWR Year (YYYY) for which case information is to be counted for MMWR publication.	Date	R		4-digit year (####)	Case Class Status		Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV176	Date of First Report to CDC	Date the case was first reported to the CDC.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV177	Date First Reported PHD	Earliest date the case was reported to a public health department.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
INV178	Pregnancy status	Indicates whether the patient was pregnant at the time of the event.	Code			YNU	Yes No Unknown (YNU)	1) If the case is a female and is/was pregnant, enable entry of number of weeks gestation at onset of illness (VAR159) 2) If the case is a female and is/was pregnant, enable entry of trimester at onset of illness (VAR160)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV179	PID	Indicates whether or not the patient has pelvic inflammatory disease (PID).	Code				Only valid for female patients.	Yes No Unknown (YNU)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
INV2001	Age at case investigation	Patient age at time of case investigation	Numeric	R				age unit required	Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	

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Generic Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Valid Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
INV2002	Age units at case investigation	Patient age units at time of case investigation	Code	O		Days Months Weeks Years	Age Unit		uses the INV2001 observation - maps to OBX-6-Units (does not use INV2002 ID or label)	CWE	O	[0..1]	

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## Varicella Case Notification Variables

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
VAR100	Number of lesions in total	Choose the numeric range within which a count of the patient's lesions falls.	Code	R		< 50 50 - 249 250 - 499 > 500	Number Of Lesions (VZ)	1) If Number of Lesions <50 are present, then enable entry of total number of lesions 2) If Number of Lesions <50 are present, then enable entry of Macule, Papule, and/or Vesicle type and enable entry of count for each type of count	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR101	Did the patient receive Varicella-containing vaccine	Indicate whether the patient received varicella-containing vaccine; a value of Yes or No enables other fields in this section, allowing for answers to their questions.	Code	R		Yes No Unknown	Yes No Unknown (YNU)	If the patient did not receive varicella-containing vaccine, then enable entry of reason why varicella-containing vaccine was not received (VAR145)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR102	Rash Onset Date	Date on which the physical manifestations of the illness—the rash—appeared	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
VAR103	Rash Location	The anatomical location where the rash was located	Code	O		Generalized Focal Unknown	Rash Distribution (VZ)	1) If Rash Location = "Focal", the enable entry of Dermatome (VAR104) 2) If Rash Location = "Generalized", the enable entry of Location First Noted (VAR105) 3) If Generalized Rash Location = "Other", the enable entry of Other Location First Noted (VAR106)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR104	Dermatome	If a value of <i>Focal</i> is specified in the Rash Location field, enter the nerve where the rash occurred (lumbar or thoracic, with a number)	Text	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	

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## Varicella Case Notification Variables

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
VAR105	Location First Noted	If a value of <i>Generalized</i> is specified for the Rash Location field, choose location where rash was first noted (if any); if none of the specific choices in the list apply, choose Other.	Code	O		Inside Mouth Legs Arms Trunk Face/Head Other	Rash Location First Noted (VZ)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR106	Other Generalized rash location	If a value of <i>Other</i> is specified in the Location First Noted, enter the location (i.e., the location where the rash was first noted is other than one of the values provided in the Location First Noted list)	Text	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	
VAR107	Macules Present	If the value specified in Total Number of Lesions is < 50, indicate whether macules were present.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	If Number of Lesions <50 and macules (flat lesions) are present, then enable entry of number of macules (flat lesions) VAR108	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR108	Number of Macules	If the value specified in Macules Present is Yes, indicate how many macules were present.	Numeric	O					Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	
VAR109	Papules Present	If the value specified in Total Number of Lesions is < 50, indicate whether papules were present.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	If Number of Lesions <50 and papules (raised lesions) are present, then enable entry of number of papules (raised lesions) (VAR110)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR110	Number of Papules	If the value specified in Papules Present is Yes, indicate how many papules were present.	Numeric	O					Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	
VAR111	Vesicles Present	If the value specified in Total Number of Lesions is < 50, indicate whether vesicles were present.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	If Number of Lesions <50 and vesicles (fluid lesions) are present, then enable entry of number of vesicles (fluid lesions) VAR112	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	



# Attachment 1E

## Varicella Case Notification Variables

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
VAR112	Number of Vesicles	If the value specified in Vesicles Present is Yes, indicate how many vesicles were present.	Numeric	O					Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	
VAR113	Mostly macular/papular	Indicate whether the lesions were mostly macular/papular.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR114	Mostly vesicular	Indicate whether the lesions were mostly vesicular.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR115	Hemorrhagic	Indicate whether the rash was hemorrhagic.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR116	Itchy	Indicate whether the patient complained of itchiness.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR117	Scabs	Indicate whether there were scabs.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR118	Crops/Waves	Indicate whether the lesions appeared in crops or waves.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR119	Did rash crust	Indicate whether the rash crusted.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	1) If the rash crusted, then enable entry of how many days until all the lesions crusted over (VAR120) 2) If the rash did not crust, then enable entry of how many days the rash lasted (VAR121)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR120	Number of Days until lesions crusted over	If the value specified in Did the rash crust? is Yes, enter the number of days that transpired for all of the lesions to crust over.	Numeric	O					Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	
VAR121	Number of Days rash lasted	If the value specified in Did the rash crust? is No, enter the number of days that the rash was present.	Numeric	O					Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	

# Attachment 1E

## Varicella Case Notification Variables

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
VAR122	Fever	Indicate whether the patient had a fever during the course of the illness.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	1) If the patient had a fever, then enable entry of date of fever onset (VAR123) 2) If the patient had a fever, then enable entry of date of highest measured temperature (VAR124) 3) If the patient had a fever, then enable entry of total number of days with fever (VAR125)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR123	Fever Onset Date	If the value specified in Did patient have fever? is Yes, indicate the date when the fever began.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
VAR124	Highest measured temperature	If the value specified in Did patient have fever? is Yes, indicate the highest temperature that was measured.	Numeric	O				If highest temperature measured, then enable entry of the highest measured temperature in Fahrenheit or Celsius	Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	
INV2003	Temperature Units	Temperature Units (Fahrenheit or Celsius).	Code	O		Fahrenheit Celsius	Temperature Unit		maps to VAR124 observation/OBX segment as the value in <i>OBX-6-Units</i> ; the variable ID and label do not appear	CWE	O	[0..1]	
VAR125	Fever Duration in Days	If the value specified in Did patient have fever? is Yes, indicate the number of days for which the patient had a fever.	Numeric	O					Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	
VAR126	Is patient immunocompromised due to medical condition or treatment	Indicate whether the patient was immunocompromised (anergic).	Code	O		Yes No Unknown	Yes No Unknown (YNU)	If the patient was immunocompromised due to medical condition or treatment, then enable entry of medical condition or treatment (VAR127)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	

# Attachment 1E

## Varicella Case Notification Variables

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
VAR127	Medical Condition or Treatment	If the value specified in Is patient immunocompromised due to medical condition or treatment? is Yes, indicate the medical condition or treatment associated with the patient being anergic.	Text	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	
VAR128	Did patient visit a healthcare provider during this illness	Indicate whether the patient visited a healthcare provider during the course of this illness.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	Enable Complications field (VAR129) only if patient did visit a healthcare provider	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR129	Did patient develop any complications that were diagnosed by a healthcare provider?	If the value specified in Did patient visit a healthcare provider during this illness? is Yes, indicate whether the patient developed complications (as described).	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	

# Attachment 1E

## Varicella Case Notification Variables

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
VAR130	Skin/soft tissue infection	If the value specified in Did patient develop any complications that were diagnosed by a healthcare provider? is Yes, indicate whether there was skin or soft tissue infection.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	1) If the patient developed any complications that were diagnosed by a healthcare provider, then enable entry of if complication was skin/soft tissue infection 2) If the patient developed any complications that were diagnosed by a healthcare provider, then enable entry of if complication was Cerebellitis/Ataxia 3) If the patient developed any complications that were diagnosed by a healthcare provider, then enable entry of if complication was Encephalitis 4) If the patient developed any complications that were diagnosed by a healthcare provider, then enable entry of if complication was Dehydration 5) If the patient developed any complications that were diagnosed by a healthcare provider, then enable entry of if complication was Hemorrhagic Condition 6) If the patient developed any complications that were diagnosed by a healthcare provider, then enable entry of if complication was Pneumonia 7) If the patient developed "other" complications that were diagnosed by a healthcare provider, then enable entry of "other" complication	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR131	Cerebellitis/ ataxia	If the value specified in Did patient develop any complications that were diagnosed by a healthcare provider? is Yes, indicate whether there was cerebellitis/ataxia.	Code	O					Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	

# Attachment 1E

## Varicella Case Notification Variables

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
VAR132	Encephalitis	If the value specified in Did patient develop any complications that were diagnosed by a healthcare provider? is Yes, indicate whether there was encephalitis.	Code	O					Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR133	Dehydration	If the value specified in Did patient develop any complications that were diagnosed by a healthcare provider? is Yes, indicate whether the patient was diagnosed as being dehydrated.	Code	O					Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR134	Hemorrhagic condition	If the value specified in Did patient develop any complications that were diagnosed by a healthcare provider? is Yes, indicate whether there was hemorrhagic condition.	Code	O					Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR135	Pneumonia	If the value specified in Did patient develop any complications that were diagnosed by a healthcare provider? is Yes, indicate whether pneumonia was a complication.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	If the patient developed any Pneumonia, then enable entry of how pneumonia was diagnosed (VAR136)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR136	How was pneumonia diagnosed	If the value in Pneumonia? is Yes, indicate how the pneumonia was diagnosed.	Code	O		Medical Doctor Radiographic imaging procedure Unknown	Diagnosed Pneumonia By (VZ)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR137	Other complications	If the value specified in Did patient develop any complications that were diagnosed by a healthcare provider? is Yes, indicate whether there were other complications not cited here.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	If the patient developed "other" complications that were diagnosed by a healthcare provider, then enable entry of "other" complication (VAR138)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	

# Attachment 1E

## Varicella Case Notification Variables

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
VAR138	Other complication details	If the value specified in Other Complications? is true, list the other complication(s).	Text	O					Observation/OBX Segment with this variable ID and label	TX	O	[0..1]	
VAR139	Antiviral treatment	Indicate whether the patient was treated with acyclovir, famvir, or any licensed antiviral.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR140	Name of medication	If the value specified in Antiviral? is yes, list the name of the medication.	Text	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	
VAR141	Start Date of Medication	Start date of medication.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
VAR142	Stop Date of medication	Stop date of medication.	Date	O					Observation/OBX Segment with this variable ID and label	TS	O	[0..1]	
VAR143	Autopsy performed	If a value of Yes is specified in Did the patient die from this illness or complications associated with this illness?, indicate whether an autopsy was performed for the death.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR144	Cause of death	If a value of Yes is specified in Did the patient die from this illness or complications associated with this illness?, indicate the official cause of death.	Text	O					Observation/OBX Segment with this variable ID and label	TX	O	[0..1]	

# Attachment 1E

## Varicella Case Notification Variables

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
VAR145	Reason why patient did not receive Varicella-containing vaccine	If the value in Did the patient receive varicella-containing vaccine? is <i>No</i> , choose the reason why the patient did not receive the vaccine; if none of the specific choices in the list apply, choose <i>Other</i> .	Code	O		Under age for vaccination Lab evidence of previous disease MD diagnosis of previous disease Medical Contraindication Born outside of U.S. Never offered vaccine Philosophical objection Other Parent/Patient report of disease Parent/Patient forgot to vaccinate Parent/Patient refusal Religious exemption Unknown	Vaccine Not Given Reason	If the Vaccine Not Given reason is other, enable Other reason why patient did not receive Varicella-containing vaccine (VAR146)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR146	Other reason why patient did not receive Varicella-containing vaccine	If the value specified in Reason why patient did not receive varicella-containing vaccine is <i>Other</i> , indicate the reason (a reason other than those provided in the list).	Text	O					Observation/OBX Segment with this variable ID and label	TX	O	[0..1]	
VAR147	Number of doses received on or after first birthday	If the value in Did the patient receive varicella-containing vaccine? is <i>Yes</i> , indicate the number of doses received (before the patient's first birthday).	Numeric	O					Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	

# Attachment 1E

## Varicella Case Notification Variables

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
VAR148	Reason patient is >= 13 years old and received one dose on or after 13th birthday but never received second dose	Reason patient is >= 13 years old and received one dose on or after 13th birthday, but never received second dose.	Code	O		Under age for vaccination Lab evidence of previous disease MD diagnosis of previous disease Medical Contraindication Born outside of U.S. Never offered vaccine Philosophical objection Other Parent/Patient report of disease Parent/Patient forgot to vaccinate Parent/Patient refusal Religious exemption Unknown	Vaccine Not Given Reason	If the patient is >= 13 years old and received one dose on or after 13th birthday but never received second dose, then enable entry of reason why second dose was not received	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR149	Other reason patient did not receive second dose	If the value specified in Number of doses received on or after first birthday is 1 (one), choose from the list the reason the patient never received the second dose; if none of the specific choices in the list apply, choose <i>Other</i> .	Text	O				If the Vaccine Not Given reason (VAR148) is Other, enable Other reason why patient did not receive Varicella-containing vaccine (VAR149)	Observation/OBX Segment with this variable ID and label	TX	O	[0..1]	



# Attachment 1E

## Varicella Case Notification Variables

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
VAR150	Diagnosed with Varicella before	Indicate whether the patient has a prior diagnosis of varicella.	Code	O		Yes No Unknown	Yes No Unknown (YNU)	If the patient has ever been diagnosed with varicella before, then enable entry of age at diagnosis (VAR151) If the patient has ever been diagnosed with varicella before, then enable entry of age type for age at diagnosis (INV2072) If the patient has ever been diagnosed with varicella before, then enable entry of who the patient was diagnosed by (VAR152)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR151	Age at diagnosis	Age at diagnosis	Numeric	O					Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	
INV2072	Age at diagnosis units	Age units of patient	Code	O		Days Months Weeks Years	Age Unit		populates OBX-6 Units field of same Observation/OBX Segment as age (VAR151) - does not pass variable ID or label	CWE	O	[0..1]	Note that the UID was formerly INV2002.
VAR152	Diagnosed by	Indicate who diagnosed the illness; if none of the choices apply choose <i>Other</i> .	Code	O		Other Parent/Friend Physician/Health Care Provider	Diagnosed By (VZ)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR154	Is this case epi-linked to another confirmed or probable case	Indicate whether this case is epi-linked to another confirmed or probable case (confirmed or probable).	Code	O		Yes No Unknown	Yes No Unknown (YNU)	If this case is epi-linked to another confirmed or probably case, then enable entry of type of case linked to (VAR155)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR155	Type of case this case is epi-linked to	If the value specified in Is this case epi-linked to another confirmed or probable case? is Yes, indicate the kind of case with which the current case is epi-linked.	Code	O		Confirmed Varicella Case Herpes Zoster Case Probable Varicella Case	Epi-linked Case Type (VZ)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	

# Attachment 1E

## Varicella Case Notification Variables

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
VAR156	Transmission setting (setting of exposure)	Location where the patient was exposed to the illness; if none of the specific choices in the list apply, choose <i>Other</i> .	Code	O		Athletics Place of Worship College Community Correctional Facility Daycare Doctor's Office Hospital ER Home Military Hospital outpatient clinic Other School International Travel Unknown Hospital Ward Work	Transmission Setting	If Transmission Setting = "Other", enable Specify other transmission setting (VAR157)	Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR157	Other transmission setting	If the value specified in Transmission Setting? is <i>Other</i> , describe the other transmission setting.	Text	O					Observation/OBX Segment with this variable ID and label	ST	O	[0..1]	
VAR158	Is this case a healthcare worker	Indicate whether the patient who is the subject of the current case is a healthcare worker.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	
VAR159	Number of weeks gestation	If the patient was pregnant during the illness, indicate the number of weeks of gestation at the onset of the illness.	Numeric	O					Observation/OBX Segment with this variable ID and label	SN	O	[0..1]	
VAR160	Trimester	If the patient was pregnant during the illness, indicate the trimester at the onset of the illness.	Code	O		First trimester Second trimester Third trimester	Pregnancy Trimester		Observation/OBX Segment with this variable ID and label	CWE	O	[0..1]	

These variables are not negotiable. Default values are provided for HL7 structural elements that are required but not part of the surveillance data requested.

Notification Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
NOT108	Notification ID	The unique identifier for the notification record.	String	R					MSH-10-Message Control ID. No UID or label is passed in the message.	ST	R	[1..1]	HL7 recommended size increased to 50
DEM197	Local patient ID	The local ID of the patient/entity.	String	R					PID-3.1 Patient Identifier List – ID Number PID-3.4 Assigning Authority format <localID&OID&ISO> Does not pass Variable ID or label.	CX	R	[1..1]	Only the sending system's internally assigned patient id used for these de-identified messages
DEM100	Patient name type	Name is not requested by the program, but the Patient Name field is required to be populated for the HL7 message to be valid. Have adopted the HL7 convention for processing a field where the name has been removed for de-identification purposes.	Coded	R		Coded Pseudo-Name to ensure anonymity	Name Type (HL7)		PID-5.7 Patient Name Type - <u>second instance</u> (does not pass Variable ID or label). HL7 reserves the first instance of the name for Legal Name.	XPN	R	[1..2]	Literal value:  ~^MMS
INV168	Local record ID	Sending system-assigned local ID of the case investigation with which the subject is associated.	Text	R					OBR-3-Filler Order Number where OBR-3.1 is the internally assigned case/investigation ID, OBR-3.3 is the OID for sending application as assigning authority, and OBR-3.4 is the literal value 'ISO'. The UID and label are not passed in the message.	EI	R	[1..1]	<same value in each OBR instance>
NOT099	Subject Type	Type of subject for the notification.	Coded	R		Person Subject	Notification Section Header		OBR[1]: Maps to the HL7 attribute OBR-4-Universal Service ID. No UID or label is passed in the message.	CE	R	[1..1]	Literal Value: 'PERSUBJ^Person Subject^2.16.840.1.114222.4.5.274'

Notification Variables								Mapping Methodology					
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
NOT101	Notification Type	Type of notification. Main notification types are "Individual Case", "Environmental", "Summary", and "Laboratory Report".	Coded	R		Individual Case Notification	Notification Section Header		OBR 2 : Maps to the HL7 attribute OBR-4-Universal Service ID. No UID or label is passed in the message.	CE	R	[1..1]	Literal Value: 'NOTF^Case Notification^2.16.840.1.114222.4.5.274'
NOT098	Supplemental Notification Type	Supplemental Notification Types which may optionally be passed are "Associated Laboratory Report" and "Associated Vaccine Report". Multiple reports may be passed.	Coded	O	Y	Associated Lab Report	Notification Section Header		OBR 3 : Maps to the HL7 attribute OBR-4-Universal Service ID. No UID or label is passed in the message.	CE	R	[0..*]	Literal Value: 'LABRPT^Associated Laboratory Report^2.16.840.1.114222.4.5.274'
NOT103	Date First Submitted	Date the notification was first sent to CDC. This value does not change after the original notification.	Date/time	R					Maps to the HL7 attribute OBR-7-Observation Date/time. No UID or label is passed in the message.	TS	R	[1..1]	<same value in each OBR instance>
NOT106	Date of Report	Date/time this version of the notification was sent. It will be the same value as NOT103 for the original notification. For updates, this is the update/send date/time.	Date/time	R					Maps to the HL7 attribute OBR-22-Result Report/Status Chg Date/time. No UID or label is passed in the message.	TS	R	[1..1]	<same value in each OBR instance>
INV169	Condition Code	Condition or event that constitutes the reason the notification is being sent.	Coded	R		10030 Varicella	Nationally Notifiable Infectious Disease (NNID) reportable to the Nationally Notifiable Disease Surveillance System (NNDSS)		Maps to HL7 attribute OBR-31-Reason for Study. The UID and label are not passed in the message.	CE	R	[1..1]	Default value in each OBR instance: '10030^Varicella Infection^2.16.840.1.1142224.5.78'

# Attachment 1E

This is the set of variables that may be passed if the Case Notification has an associated Laboratory report. The laboratory report is not required to be included with the Notification. A notification may also contain more than one Associated Laboratory Report section.

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
LAB143	Reporting Lab Name	Name of Laboratory that reported test result.	Alphanumeric	O					Observation/OBX segment under OBR[3] with Universal Service ID of 'LABRPT'	ST	O	[0..1]	
LAB144	Reporting Lab CLIA Number	CLIA (Clinical Laboratory Improvement Act) identifier for the laboratory that performed the test.	Alphanumeric	O					Observation/OBX segment under OBR[3] with Universal Service ID of 'LABRPT'	ST	O	[0..1]	
LAB163	Date of Specimen Collection	The date the specimen was collected.	Date	O					Observation/OBX segment under OBR[3] with Universal Service ID of 'LABRPT'	TS	O	[0..1]	
LAB503	Date Sample Received at Lab	Date Sample Received at Lab (accession date).	Date	O					Observation/OBX segment under OBR[3] with Universal Service ID of 'LABRPT'	TS	O	[0..1]	
LAB108	Sample Analyzed date	The date and time the sample was analyzed by the laboratory.	Date	O					Observation/OBX segment under OBR[3] with Universal Service ID of 'LABRPT'	TS	O	[0..1]	
LAB197	Lab Report Date	Date result sent from Reporting Laboratory.	Date	O					Observation/OBX segment under OBR[3] with Universal Service ID of 'LABRPT'	TS	O	[0..1]	
LAB334	Date received in state public health lab	Date the isolate was received in state public health laboratory.	Date	O					Observation/OBX segment under OBR[3] with Universal Service ID of 'LABRPT'	TS	O	[0..1]	
LAB125	Accession Number	A laboratory generated number that identifies the specimen related to this test.	Alphanumeric	O					Observation/OBX segment under OBR[3] with Universal Service ID of 'LABRPT'	ST	O	[0..1]	

# Attachment 1E

This is the set of variables that may be passed if the Case Notification has an associated Laboratory report. The laboratory report is not required to be included with the Notification. A notification may also contain more than one Associated Laboratory Report section.

Program-Specific Surveillance Variables									Mapping Methodology				
PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Req/Opt	May Repeat	Coded Concepts	Value Set Name	Data Validation	Message Context	HL7 Data Type	HL7 Usage	HL7 Cardinality	Implementation Notes
LAB165	Specimen Source	The medium from which the specimen originated. Examples include whole blood, saliva, urine, etc.	Code	O		Blood Buccal swab Macular scraping Saliva Scab Tissue culture Urine Vesicular swab	Specimen		Observation/OBX segment under OBR[3] with Universal Service ID of 'LABRPT'	CE	O	[0..1]	
LAB101	Resulted Test Name	The lab test that was run on the specimen.	Code	O		<get the list of VZ LOINC codes>	Lab Test Result Name		Observation/OBX segment under OBR[3] with Universal Service ID of 'LABRPT'	CE	O	[0..1]	
LAB192	Coded Result Value	Coded qualitative result value.	Code	O		Not Done Unknown Indeterminate Negative Positive Pending	Modifier or Qualifier		Observation/OBX segment under OBR[3] with Universal Service ID of 'LABRPT'	CE	O	[0..1]	
LAB508	Sent to CDC for Genotyping	Indicate whether the specimens were sent to CDC for genotyping.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX segment under OBR[3] with Universal Service ID of 'LABRPT'	CE	O	[0..1]	
LAB509	Genotyping Sent Date	If the specimen was sent to the CDC for genotyping, date on which the specimens were sent.	Date	O					Observation/OBX segment under OBR[3] with Universal Service ID of 'LABRPT'	TS	O	[0..1]	
LAB510	Sent For Strain ID	Indicate whether the specimen was sent for strain identification.	Code	O		Yes No Unknown	Yes No Unknown (YNU)		Observation/OBX segment under OBR[3] with Universal Service ID of 'LABRPT'	CE	O	[0..1]	
LAB511	Strain Type	If the specimen was sent for strain identification, indicate the strain.	Code	O		Unknown Vaccine Type Strain Wild Type Strain	StrainType (VZ)		Observation/OBX segment under OBR[3] with Universal Service ID of 'LABRPT'	CE	O	[0..1]	