

DPCC Data Standard Reference for Animal Surveillance v2.2

|                         | Project_Identifier  | Contributing_Institution   | Sample_Identifier   | Embargo_End_Date   | Sample_Material   |
|-------------------------|---|--|---|--|---|
| <b>Input Type</b>       | Text Field  | Text Field   | Text Field  | Date Field   | Text Field  |
| <b>Definition</b>       | A unique Project Identifier generated by the DPCC by combining the Center-generated Project Code and a random 4-digit number. | The institution code for the group that COLLECTED THE SAMPLE. Must be one of the CEIRS institution codes assigned by NIAID.                        | Identifier initially assigned to each sample collected. If multiple samples are taken from the same host, each sample should have its own identifier. | In case an embargo of the information is needed, the date that the information should be released to the public databases by the DPCC.   | Material on which the testing was performed. If multiple samples are taken from the same host, they must be entered as separate records.  |
| <b>Format</b>           | Project_Code_XXXX<br>Maximum length: 21 characters  | Center three-letter code followed by three digits.<br>Maximum length: 6 characters   | Center-specific<br>Allowed characters include alphanumeric, hyphen, and underscore: a-z, A-Z, 0-9, -, _<br>Maximum length: 50 characters              | DD-Mon-YYYY<br>DD-Mon-YY<br>NA<br>Maximum length: 11 characters  | Text<br>Maximum length: 30 characters   |
| <b>Value List</b>       | None  | None   | None  | Date<br>NA   | AIR<br>BAL<br>BLO<br>CCF<br>CCO<br>CCT<br>CLO<br>FEC<br>LFL<br>LUN<br>NAL<br>NAS<br>NTS<br>ORP<br>OTH-<br>OTT<br>PLS<br>RCS<br>SER<br>SLU<br>SOI<br>SPU<br>TFB<br>TFT<br>TRS<br>WAT<br>U  |
| <b>Curation</b>         | The entry must be a Project Identifier value registered with the DPCC.  | The entry must be an Institution Code value registered with the DPCC.<br>Center 3-letter codes are case-sensitive and must be entered in all-caps. | The value must be unique and not match any previously submitted Sample_Identifier.  | 1. Leading 0 in DD is optional.<br>2. Month must match the first three letters of the month. Month is NOT case-sensitive.<br>3. Years may have two or four digits.<br>4. Date must conform to NIAID data release policies. | The entry must be one and only one member of the Value List.<br>Values are case-sensitive and must be entered in all-caps.  |
| <b>Examples</b>         | SJCProj02_4001  | SJC101   | 22258468  | 3-Mar-2011,<br>03-Mar-2011,<br>03-MAR-2011,<br>3-MAR-11, or<br>NA  | BLO   |
| <b>Notes</b>            | None  | None   | The Sample_Identifier initially assigned to the surveillance sample must be provided.   | An exact date must be provided.<br>If Embargo_End_Date is NA, information will be released without delay.<br>Embargo_End_Date cannot be more than 12 months after submission.  | AIR = Air<br>BAL = Bronchoalveolar lavage<br>BLO = Blood<br>CCF = Combined cloacal and fecal<br>CCO = Combined cloacal and oral-pharyngeal<br>CCT = Combined cloacal and tracheal<br>CLO = Cloacal<br>FEC = Feces<br>LFL = Lung lavage fluid<br>LUN = Lungs<br>NAL = Nasal lavage<br>NAS = Nasal swab<br>NTS = Combined nasal throat swab<br>ORP = Oral-pharyngeal<br>OTH- = Other; append free text to describe<br>OTT = Other tissue<br>PLS = Plasma<br>RCS = Rectal swab<br>SER = Serum<br>SLU = Slurry<br>SOI = Soil<br>SPU = Sputum<br>TFB = Tissue from brain<br>TFT = Tissue from trachea<br>TRS = Tracheal swab<br>WAT = Water<br>U = Unknown |
| <b>Dependent Fields</b> |   |  |   |  |   |
| <b>Validation</b>       | Project_Identifier should be a valid project identifier.  | Must be an Institution Code value registered with the DPCC   | Validate field length   | Embargo_End_Date must be exact date and cannot be a past date.   | Field value should be one of valid values as in list.<br>NOTE: User can enter other value by prefixing 'OTH'  |
| <b>Message Code</b>     | Error_9_PROJECT_NOT_FOUND   | Error_1_INVALID_VALUE  | Error_70_INVALID_FIELD_LENGTH   | Error_7_INVALID_EMBARGO_DATE   | Error_1_INVALID_VALUE   |
| <b>Validation</b>       | Project_Identifier exists but user does not have permission to access or edit the project.                                    |  | Sample_Identifier should be unique across all DPCC data.  | Embargo_End_Date cannot be more than 12 months after submission.   | Validate field length   |
| <b>Message Code</b>     | Error_4_DENIED_USER_ACCESS  |  | Error_66_NON_UNIQ_SAMPL_ID  | Error_100_EMBARGO_DATE_12M   | Error_75_INVALID_FIELD_LENGTH_OTH   |
| <b>Validation</b>       |   |  | Sample_Identifier should be unique within the submission.   |  |   |
| <b>Message Code</b>     |   |  | Error_81_NON_UNIQ_SAMPL_ID  |  |   |
| <b>Validation</b>       |   |  |   |  |   |
| <b>Message Code</b>     |   |  |   |  |   |
| <b>Validation</b>       |   |  |   |  |   |
| <b>Message Code</b>     |   |  |   |  |   |
| <b>Validation</b>       |   |  |   |  |   |
| <b>Message Code</b>     |   |  |   |  |   |
| <b>Validation</b>       |   |  |   |  |   |
| <b>Message Code</b>     |   |  |   |  |   |
| <b>Validation</b>       |   |  |   |  |   |
| <b>Message Code</b>     |   |  |   |  |   |

|                         | Sample_Transport_Medium   | Sample_Receipt_Date  | Strain_Name   | Host_Species  | Host_Common_Name   |
|-------------------------|---|--|---|---|--|
| <b>Input Type</b>       | Text Field  | Date Field   | Text Field  | Text Field  | Text Field   |
| <b>Definition</b>       | Medium in which the sample is transported from the field to the lab   | Date on which the field sample was received in the laboratory  | The WHO strain name of the virus that was isolated from the sample  | Full scientific name of host genus and species, without abbreviations, as listed in the DPCC Species Dictionary   | The English common name given to a particular species as listed in the DPCC Species Dictionary   |
| <b>Format</b>           | Text<br>Maximum length: 30 characters   | DD-Mon-YYYY<br>DD-Mon-YY<br>Mon-YYYY<br>Mon-YY<br>YYYY<br>YY<br>Maximum length: 11 characters  | Antigenic Type/Host of Origin/Geographical Origin/Strain Number/Year of Isolation (Subtype)<br>Maximum length: 150 characters   | Text<br>Maximum length: 100 characters  | Text<br>Maximum length: 100 characters   |
| <b>Value List</b>       | ETH<br>GUA<br>OTH<br>SER<br>VTM<br>U  | Date<br>U  | Text<br>U<br>NA   | DPCC Species Dictionary<br>ENV<br>U   | DPCC Species Dictionary<br>U   |
| <b>Curation</b>         | The entry must be one and only one member of the Value List.<br><br>Values are case-sensitive and must be entered in all-caps.              | 1. Leading 0 in DD is optional.<br>2. Month must match the first three letters of the month. Month is NOT case sensitive.<br>3. Years may have two or four digits.<br>4. Use U (Unknown) if date is not known. | Must only be provided when there is a viral isolate; otherwise use U for samples that are PCR positive but there is no viral isolate.<br><br>WHO strain naming convention:<br>Fields must be ordered as follows and separated with the 7 character:<br>1. The antigenic type (e.g., A, B, C, D)<br>2. The host of origin (e.g., swine, equine, chicken. For human-origin viruses, no host of origin designation is given.)<br>3. Geographical origin (e.g., Denver, Taiwan)<br>4. Strain number (e.g., 15, 7)<br>5. Year of isolation (e.g., 2009, 1934)<br>6. For influenza A viruses, the hemagglutinin and neuraminidase antigen description in parentheses (e.g., (H1N1), (H3N2)) | If the entry is not ENV or U, the host species name is validated against the DPCC Species Dictionary.   | The entry must be a text string or U.<br><br>If the entry is not U, the host common name is validated against the DPCC Species Dictionary.                           |
| <b>Examples</b>         | VTM, or<br>OTH-PBS Glycerol   | 3-Mar-2011,<br>03-Mar-2011,<br>03-MAR-2011,<br>Mar-2011,<br>3-Mar-11,<br>2011,<br>11, or<br>U  | A/Hong Kong/1/1968 (H3N2),<br>A/chicken/Fujian/4/2002 (H3N6),<br>A/chicken/Fujian/4/2002 (H5Nx),<br>A/chicken/Fujian/4/2002 (mixed),<br>A/swine/Iowa/233-56/2011 (H3N2v),<br>A/duck/Alberta/35/1976 (H1N1),<br>B/Hong Kong/432/2014, or<br>C/Texas/19876/2011   | Sus scrofa, or<br>Anser anser   | wild boar, or<br>greater white-fronted goose   |
| <b>Notes</b>            | ETH = Ethanol<br>GUA = Guanidine<br>OTH = Other; append free text to describe<br>SER = Serum<br>VTM = Viral transport medium<br>U = Unknown | At least one date must be provided for Sample_Receipt_Date or Collection_Date.   | Reference:<br><a href="http://www.cdc.gov/flu/about/viruses/types.htm">http://www.cdc.gov/flu/about/viruses/types.htm</a><br><br>(H5Nx) can be used in cases where a partial subtype has been determined (e.g., H5Nx).<br><br>If there are mixed subtypes contained within a sample use A/chicken/Fujian/4/2002 (mixed) for Strain_Name or list multiple comma-separated Strain_Names:<br>A/mallard/Alaska/2/2007 (H3N8) A/mallard/Alaska/2/2007 (H3N9)   | Please reference the DPCC Species Dictionary for allowed values.<br><br>Use ENV (ironment) for samples taken from the environment (e.g., a water sample or feces picked up from the beach) when the source species is not known.<br><br>If genus is known but species is unknown, then use the genus followed by 'sp.' (for example domestic duck would be reported as 'Anas sp.').<br><br>If both the genus and species are unknown, then use the scientific family name, without abbreviation (e.g., Charadriidae).<br><br>Enter U for all other cases. | Please reference the DPCC Species Dictionary for allowed values.<br><br>Use U if host common name is unknown or if the value entered under Host_Species is ENV or U. |
| <b>Dependent Fields</b> |   | Collection_Date  |   | Host_Common_Name,<br>Host_Age   | Host_Species,<br>Host_Age  |
| <b>Validation</b>       | Field value should be one of valid values as in list. NOTE: User can enter other value by prefixing 'OTH'                                   | Validate date format   | Validate field length   | Validate against DPCC Species Dictionary  | Validate against DPCC Species Dictionary   |
| <b>Message Code</b>     | Error_1_INVALID_VALUE   | Error_67_INVALID_DATE_WITH_U   | Error_70_INVALID_FIELD_LENGTH   | Error_1_INVALID_VALUE   | Error_1_INVALID_VALUE  |
| <b>Validation</b>       | Validate field length   | Date cannot be future date   | Host of origin element of strain name must be alphanumeric, underscore, dash, period, or single quote: a-z, A-Z, 0-9, -, ., ' ,'  |   |  |
| <b>Message Code</b>     | Error_75_INVALID_FIELD_LENGTH_OTH   | Error_68_INVALID_FUTURE_DATE   | Error_137_INVALID_HOST_SPECIES_STRAIN_TEXT  |   |  |
| <b>Validation</b>       |   | Collection_Date must be before Sample_Receipt_Date.  | Geographical origin element of strain name must be alphanumeric, underscore, dash, period, or single quote: a-z, A-Z, 0-9, -, ., ' ,'   |   |  |
| <b>Message Code</b>     |   | Error_61_INVALID_DATE_ORDER  | Error_138_INVALID_LOCATION_STRAIN_TEXT  |   |  |
| <b>Validation</b>       |   | At least one date must be entered for receipt or collection date. Fields cannot both be blank.   | Strain number element of strain name must be alphanumeric, underscore, dash, or period: a-z, A-Z, 0-9, -, ., ' ,'   |   |  |
| <b>Message Code</b>     |   | Error_118_DATE_MISSING   | Error_139_INVALID_STRAIN_NUMBER_STRAIN_TEXT   |   |  |
| <b>Validation</b>       |   |  | Year of isolation element of strain name must be 4-digit year.  |   |  |
| <b>Message Code</b>     |   |  | Error_110_INVALID_STRAIN_YEAR   |   |  |
| <b>Validation</b>       |   |  | If strain is influenza A, subtype must be present as text between parentheses   |   |  |
| <b>Message Code</b>     |   |  | Error_112_INVALID_STRAIN_SUBTYPE  |   |  |
| <b>Validation</b>       |   |  | Brackets cannot be present if strain does not have ra- prefix.  |   |  |
| <b>Message Code</b>     |   |  | Error_119_INVALID_STRAIN_BRACKETS   |   |  |

|                         | Host_Identifier   | Host_ID_Type   | Host_Capture_Status  | Host_Health  |
|-------------------------|---|--|--|--|
| <b>Input Type</b>       | Text Field  | Text Field   | Text Field   | Text Field   |
| <b>Definition</b>       | An identifier assigned to the host by the collector   | The type or format and agency assigning the host identifier  | The capture status of the host animal the sample was drawn from  | The health of the animal at the time of capture  |
| <b>Format</b>           | Text<br>Allowed characters include alphanumeric, hyphen, and underscore: a-z, A-Z, 0-9, -, _<br>Maximum length: 50 characters   | Text<br>Maximum length: 50 characters  | Text<br>Maximum length: 30 characters  | Text<br>Maximum length: 3 characters   |
| <b>Value List</b>       | Text<br>U   | Text<br>U  | ABT<br>ACT<br>FRM<br>HUN<br>MRK<br>OBK<br>OTH-<br>PET<br>SEH<br>ZOO<br>U   | DED<br>HLT<br>SIC<br>U   |
| <b>Curation</b>         | The entry must be a text string or U.   | The entry must be a text string or U.  | The entry must be one and only one member of the Value List.<br><br>Values are case-sensitive and must be entered in all-caps.<br><br>If OTH- is selected, optionally append details.  | The entry must be one and only one member of the Value List.<br><br>Values are case-sensitive and must be entered in all-caps. |
| <b>Examples</b>         | F001  | Patuxent BBL leg band,<br>Moscow banding center leg band,<br>Web tag<br>UAF hunter ID, or<br>UAF unique name   | FRM, or<br>OTH-restaurant  | HLT  |
| <b>Notes</b>            | If multiple samples are collected from a host, then all must be linked to the same Host_Identifier. If band/tag number is part or all of the Host_Identifier, please indicate the banding agency in Host_ID_Type. | See<br><a href="http://www.pwrc.usgs.gov/BBL/homepage/aboutaux.cfm">http://www.pwrc.usgs.gov/BBL/homepage/aboutaux.cfm</a><br>Web tag<br><a href="http://www.pwrc.usgs.gov/BBL/homepage/link.cfm">http://www.pwrc.usgs.gov/BBL/homepage/link.cfm</a> for information on international banding schemes. | ABT = Abattoir<br>ACT = Active surveillance (e.g., trap); sampling not initiated by an outbreak<br>FRM = Farm sample<br>HUN = Opportunistically sampled (e.g., hunter-killed or killed in order to take sample)<br>MRK = Market sample<br>OBK = Sample collected in response to outbreak (sick or dying birds)<br>OTH- = Other, append free text to describe<br>PET = Sample obtained from a pet<br>SEH = Semi-enclosed housing<br>ZOO = Sample obtained from a zoo<br>U = Unknown | DED = Dead<br>HLT = Healthy<br>SIC = Sick<br>U = Unknown   |
| <b>Dependent Fields</b> | Host_ID_Type  |  |  |  |
| <b>Validation</b>       | Validate field length   | Validate field length  | Field value should be one of valid values as in list. NOTE: User can enter other value by prefixing 'OTH-'   | Field value should be one of valid values as in list.  |
| <b>Message Code</b>     | Error_70_INVALID_FIELD_LENGTH   | Error_70_INVALID_FIELD_LENGTH  | Error_1_INVALID_VALUE  | Error_1_INVALID_VALUE  |
| <b>Validation</b>       |   |  | Validate field length  |  |
| <b>Message Code</b>     |   |  | Error_75_INVALID_FIELD_LENGTH_OTH  |  |
| <b>Validation</b>       |   |  |  |  |
| <b>Message Code</b>     |   |  |  |  |
| <b>Validation</b>       |   |  |  |  |
| <b>Message Code</b>     |   |  |  |  |
| <b>Validation</b>       |   |  |  |  |
| <b>Message Code</b>     |   |  |  |  |
| <b>Validation</b>       |   |  |  |  |
| <b>Message Code</b>     |   |  |  |  |
| <b>Validation</b>       |   |  |  |  |
| <b>Message Code</b>     |   |  |  |  |
| <b>Validation</b>       |   |  |  |  |
| <b>Message Code</b>     |   |  |  |  |

|                         | Host_Natural_State   | Host_Habitat   | Host_Sex   | Host_Age  | Collector_Name  |
|-------------------------|--|--|--|---|---|
| <b>Input Type</b>       | Text Field   | Text Field   | Text Field   | Text Field  | Text Field  |
| <b>Definition</b>       | Classification of the animal's domestication status  | Description of the animal's habitat  | Gender of host animal from which the sample was taken  | Age of animal from which sample was taken   | The name of person who collected the sample   |
| <b>Format</b>           | Text<br>Maximum length: 30 characters  | Text<br>Maximum length: 30 characters  | Text<br>Maximum length: 1 character  | Text<br>Maximum length: 3 characters  | FirstName LastName<br>FirstName MI. LastName<br>Maximum length: 100 characters  |
| <b>Value List</b>       | CPW<br>DMF<br>DOM<br>OTH-<br>WLD<br>U  | FRF<br>FRI<br>MAR<br>MIG<br>OTH-<br>RES<br>SEH<br>U  | M<br>F<br>U  | ADL<br>JUV<br>PUP<br>SAD<br>WNL<br>U  | Text<br>U   |
| <b>Curation</b>         | The entry must be one and only one member of the Value List.<br><br>Values are case-sensitive and must be entered in all-caps.   | The entry must be one and only one member of the Value List.<br><br>Values are case-sensitive and must be entered in all-caps.<br><br>If Host_Natural_State is WLD, then Host_Habitat must be MIG/RES/U/OTH-text.<br><br>If Host_Natural_State is DOM, then Host_Habitat must be FRF/FRI/SEH/MAR/U/OTH-text.<br><br>If Host_Natural_State is U, then Host_Habitat should be U.<br><br>If Host_Natural_State is OTH-text, then Host_Habitat should be Other and provided as OTH-text. | The entry must be one and only one member of the Value List.<br><br>Values are case-sensitive and must be entered in all-caps. | The entry must be one and only one member of the Value List.<br><br>Values are case-sensitive and must be entered in all-caps.<br><br>For Avian species, Host_Age must be one of the following values:<br>ADL = Adult (After hatch year)<br>JUV = Juvenile (Hatch year)<br>U = Unknown/undetermined<br><br>For Non-Human Mammalian species, Host_Age must be one of the following values:<br>ADL = Adult<br>JUV = Juvenile<br>PUP = Pup<br>SAD = Subadult<br>WNL = Weanling<br>U = Unknown/undetermined | None  |
| <b>Examples</b>         | WLD  | FRF  | M  | WNL   | Indiana Jones,<br>John M. Henry, or<br>U  |
| <b>Notes</b>            | CPW = Captive-Wild: captive wild animals such as wild birds at markets or tigers at zoos<br>DMF = Domestic feral: domestic animal which is feral, such as feral pigs<br>DOM = Domestic: indisputably domestic, such as back-yard chickens or pigs on pig farms<br>OTH = Other: append free text to describe. Those that cannot be readily placed into WLD or DOM, such as captive exotics<br>WLD = Wild: indisputably wild, such as swans in Mongolia or seal lions at a rehab center<br>U = Unknown: natural state is unknown | FRF = Farm free-range<br>FRI = Farm, indoor (e.g., brood hen or brood sow)<br>MAR = Live market<br>MIG = Migratory: having no fixed, year-round residence<br>OTH = Other: append free text to describe<br>RES = Resident: such as a flock/herd that resides year-round in one location<br>SEH = Semi-enclosed housing<br>U = Unknown   | M = Male<br>F = Female<br>U = Unknown  | ADL = Adult (After hatch year)<br>JUV = Juvenile (Hatch year)<br>PUP = Pup<br>SAD = Subadult<br>WNL = Weanling<br>U = Unknown/undetermined  | For listing of multiple names, comma-separate the names maintaining the order of FirstName and LastName or FirstName MI. LastName.<br><br>Enter U if name is unknown. |
| <b>Dependent Fields</b> | Host_Habitat   | Host_Natural_State   |  | Host_Species,<br>Host_Common_Name   |   |
| <b>Validation</b>       | Field value should be one of valid values as in list. NOTE: User can enter other value by prefixing 'OTH-'   | Field value should be one of valid values as in list. NOTE: User can enter other value by prefixing 'OTH-'   | Field value should be one of valid values as in list.  | Field value should be one of valid values as in list.   | Validate field length   |
| <b>Message Code</b>     | Error_1_INVALID_VALUE  | Error_1_INVALID_VALUE  | Error_1_INVALID_VALUE  | Error_1_INVALID_VALUE   | Error_70_INVALID_FIELD_LENGTH   |
| <b>Validation</b>       | Validate field length  | Validate Host_Habitat when Host_Natural_State is WLD   |  |   | Multiple names must be entered as comma-separated values in the order of Firstname Lastname.  |
| <b>Message Code</b>     | Error_75_INVALID_FIELD_LENGTH_OTH  | Error_71_HOST_NAT_STATE_WLD  |  |   | Error_76_INVALID_NAME_LIST  |
| <b>Validation</b>       |  | Validate Host_Habitat when Host_Natural_State is DOM   |  |   |   |
| <b>Message Code</b>     |  | Error_72_HOST_NAT_STATE_DOM  |  |   |   |
| <b>Validation</b>       |  | Validate Host_Habitat when Host_Natural_State is U   |  |   |   |
| <b>Message Code</b>     |  | Error_73_HOST_NAT_STATE_U  |  |   |   |
| <b>Validation</b>       |  | Validate field length  |  |   |   |
| <b>Message Code</b>     |  | Error_70_INVALID_FIELD_LENGTH  |  |   |   |
| <b>Validation</b>       |  |  |  |   |   |
| <b>Message Code</b>     |  |  |  |   |   |
| <b>Validation</b>       |  |  |  |   |   |
| <b>Message Code</b>     |  |  |  |   |   |

|                         | Collection_Date  | Collection_Country   | Collection_State_Province  | Collection_City  | Collection_POI   |
|-------------------------|--|--|--|--|--|
| <b>Input Type</b>       | Date Field   | Text Field   | Text Field   | Text Field   | Text Field   |
| <b>Definition</b>       | Date on which the field sample was collected   | Country in which the original sample was collected, as listed in the DPCC Country Codes list                               | Descriptor of sampling location that is one gradation finer than country   | Descriptor of sampling location that is one gradation finer than State or Province   | Description of local sampling environment, such as name of wild life refuge, name of zoo, name of retail market  |
| <b>Format</b>           | DD-Mon-YYYY<br>DD-Mon-YY<br>Mon-YYYY<br>Mon-YY<br>YYYY<br>YY<br>Maximum length: 11 characters  | Text<br>Maximum length: 60 characters  | Text<br>Maximum length: 50 characters  | Text<br>Maximum length: 50 characters  | Text<br>Maximum length: 100 characters   |
| <b>Value List</b>       | Date<br>U  | ISO 3166 Standard Country Code<br>U  | Text<br>NA<br>U  | Text<br>NA   | Text<br>NA   |
| <b>Curation</b>         | 1. Leading 0 in DD is optional.<br>2. Month must match the first three letters of the month. Month is NOT case-sensitive.<br>3. Years may have two or four digits.<br>4. Use U (Unknown) if date is not known. | The entry must be one and only one member of the Value List.<br>Values are case-sensitive and must be entered in all-caps. | None   | None   | None   |
| <b>Examples</b>         | 3-Mar-2011,<br>03-Mar-2011,<br>03-MAR-2011,<br>Mar-2011,<br>3-Mar-11,<br>2011,<br>11, or<br>U  | VNM, or<br>USA   | Tennessee  | Nashville  | Bass Lake Refuge, Memphis  |
| <b>Notes</b>            | At least one date must be provided for Sample_Receipt_Date or Collection_Date.   | The ISO 3166 Standard for country codes may be found on the DPCC Portal.   | The GeoNames geographical database can be used to identify specific states and provinces:<br><a href="http://www.geonames.org/">http://www.geonames.org/</a> | The GeoNames geographical database can be used to identify specific cities:<br><a href="http://www.geonames.org/">http://www.geonames.org/</a> | The GeoNames geographical database can be used to identify specific points-of-interest:<br><a href="http://www.geonames.org/">http://www.geonames.org/</a> |
| <b>Dependent Fields</b> | Sample_Receipt_Date  |  |  |  |  |
| <b>Validation</b>       | Validate date format   | Field value should be a valid ISO three-letter country code or U   | Validate field length  | Validate field length  | Validate field length  |
| <b>Message Code</b>     | Error_67_INVALID_DATE_WITH_U   | Error_1_INVALID_VALUE  | Error_70_INVALID_FIELD_LENGTH  | Error_70_INVALID_FIELD_LENGTH  | Error_70_INVALID_FIELD_LENGTH  |
| <b>Validation</b>       | Date cannot be future date   |  |  |  |  |
| <b>Message Code</b>     | Error_68_INVALID_FUTURE_DATE   |  |  |  |  |
| <b>Validation</b>       | Collection_Date must be before Sample_Receipt_Date.  |  |  |  |  |
| <b>Message Code</b>     | Error_61_INVALID_DATE_ORDER  |  |  |  |  |
| <b>Validation</b>       | At least one date must be entered for receipt or collection date. Fields cannot both be blank.   |  |  |  |  |
| <b>Message Code</b>     | Error_118_DATE_MISSING   |  |  |  |  |
| <b>Validation</b>       |  |  |  |  |  |
| <b>Message Code</b>     |  |  |  |  |  |
| <b>Validation</b>       |  |  |  |  |  |
| <b>Message Code</b>     |  |  |  |  |  |
| <b>Validation</b>       |  |  |  |  |  |
| <b>Message Code</b>     |  |  |  |  |  |

|                         | Collection_Latitude  | Collection_Longitude  | Influenza_Test_Type   | Influenza_Test_Result  | Influenza_Test_Interpretation   |
|-------------------------|--|---|---|--|---|
| <b>Input Type</b>       | Text Field   | Text Field  | Text Field  | Text Field   | Text Field  |
| <b>Definition</b>       | Latitude by GPS of site at which original sample was collected. If not available, a coarse estimate is acceptable.                             | Longitude by GPS of site at which original sample was collected. If not available, a coarse estimate is acceptable.                             | Assay and target used for virological assessment, as listed in the DPCC Data Dictionary   | The numerical result(s) of Influenza_Test_Type   | The Positive, Negative, or Inconclusive interpretation of the Influenza_Test_Result value(s)  |
| <b>Format</b>           | World Geodetic System (WGS84)<br>Maximum length: 20 characters   | World Geodetic System (WGS84)<br>Maximum length: 20 characters  | Assay/Analyte<br>Maximum length: 200 characters   | Text<br>Maximum length: 50 characters  | Text<br>Maximum length: 50 characters   |
| <b>Value List</b>       | Number<br>NA   | Number<br>NA  | DPCC Data Dictionary<br>NA  | Number<br>U<br>NA  | P<br>N<br>U<br>NA   |
| <b>Curation</b>         | The entry must be in WGS84 decimal degree format   | The entry must be in WGS84 decimal degree format  | The entry must be one or more comma-separated members of the Value List.<br><br>If multiple tests are performed, separate each Assay/Analyte combination with a comma.<br><br>For each assay performed, the target or analyte must be specified after the / character.<br><br>Enter NA for serum samples. | For each assay listed under Influenza_Test_Type, provide a single numerical value.<br><br>If multiple comma-separated tests are listed under Influenza_Test_Type, Influenza_Test_Result must list the same number of comma-separated test results (see notes for examples).<br><br>Enter U when quantitative assay results are not known.<br><br>Enter NA for serum samples. | The entry must be one or more comma-separated members of the Value List.<br><br>Values are case-sensitive and must be entered in all-caps.<br><br>If multiple comma-separated tests are listed under Influenza_Test_Type, Influenza_Test_Interpretation must list the same number of comma-separated test results (see notes for examples).<br><br>Enter U when the interpretation of the assay results is not known or inconclusive.<br><br>Enter NA if the value under Influenza_Test_Type is NA. |
| <b>Examples</b>         | 35.1174  | -89.9711  | RRT-PCR/MP  | 24.5   | P   |
| <b>Notes</b>            | The GeoNames geographical database can be used to identify specific latitudes: <a href="http://www.geonames.org/">http://www.geonames.org/</a> | The GeoNames geographical database can be used to identify specific longitudes: <a href="http://www.geonames.org/">http://www.geonames.org/</a> | Please reference the DPCC Data Dictionary for the Assay and Analyte allowed values.   |  | P = Positive<br>N = Negative<br>U = Unknown or inconclusive<br>NA = Not Applicable<br><br>Example: if Influenza_Test_Type lists RRT-PCR/MP,VIMDCK then Influenza_Test_Interpretation would read P,N   |
| <b>Dependent Fields</b> |  |   | Influenza_Test_Result,<br>Influenza_Test_Interpretation   | Influenza_Test_Type,<br>Influenza_Test_Interpretation  | Influenza_Test_Type,<br>Influenza_Test_Result   |
| <b>Validation</b>       | Validate WGS84 format  | Validate WGS84 format   | Fields Influenza_Test_Type, Influenza_Test_Antigen,Influenza_Test_Result,Influenza_Test_Interpretation must have same number of values  | Fields Influenza_Test_Type, Influenza_Test_Antigen,Influenza_Test_Result,Influenza_Test_Interpretation must have same number of values   | Fields Influenza_Test_Type, Influenza_Test_Antigen,Influenza_Test_Result,Influenza_Test_Interpretation must have same number of values  |
| <b>Message Code</b>     | Error_79_INVALID_WGS84_FORMAT  | Error_79_INVALID_WGS84_FORMAT   | Error_63_INVALID_NUMBER_ENTRIES   | Error_63_INVALID_NUMBER_ENTRIES  | Error_63_INVALID_NUMBER_ENTRIES   |
| <b>Validation</b>       |  |   | Validate field length   | Field length validation  | Field value should be one of valid values as in list.   |
| <b>Message Code</b>     |  |   | Error_70_INVALID_FIELD_LENGTH   | Error_70_INVALID_FIELD_LENGTH  | Error_1_INVALID_VALUE   |
| <b>Validation</b>       |  |   | Values must reference DPCC Data Dictionary.   | Value must be number, U, or NA   |   |
| <b>Message Code</b>     |  |   | Error_13_REFER_TO_DATA_DICTIONARY   | Error_86_INVALID_NUM_U_NA  |   |
| <b>Validation</b>       |  |   | Influenza_Test_Type should follow format assay/analyte  |  |   |
| <b>Message Code</b>     |  |   | Error_101_TEST_TYPE_FORMAT  |  |   |
| <b>Validation</b>       |  |   |   |  |   |
| <b>Message Code</b>     |  |   |   |  |   |
| <b>Validation</b>       |  |   |   |  |   |
| <b>Message Code</b>     |  |   |   |  |   |
| <b>Validation</b>       |  |   |   |  |   |
| <b>Message Code</b>     |  |   |   |  |   |
| <b>Validation</b>       |  |   |   |  |   |

