

APPENDIX G

New Jersey Department of Health and Senior Services
Division of HIV/AIDS Services, Epidemiologic Services

Instructions for Electronic Submission of Laboratory Results
Indicative of HIV Infection

A. Data Standards

The following standards shall apply to the submission of electronic data.

All records will end with a carriage return.

Blanks fields shall be accepted for non-required fields.

Dates shall be formatted as YYYYMMDD.

Include hyphens for phone numbers and zip codes.

Social security numbers (SSN optional) may not contain any spaces, dashes, or hyphens. National codes shall be used as applicable Health Level (HL)7v2x, Federal Information Processing Standards (FIPS), Logical Observation Identifier Names and Codes (LOINC), Systematized Nomenclature for Human and Veterinary Medicine (SNOWMED) and United States Postal Service (USPS).

B. File Formats

One of the following file formats shall be used for submission of electronic data.

1. HL 7 formats

The following fields are required.

Date Definitions	HL7 V2.4Field	HLT V2.3z Field
Name of sending Lab or reporting site	MSH0401 SendingFac_Namespace	MSH0401 SendingFac_Namespace
Reporting Sending Lab CLIA number	MSH0402 SendingFac_UnivID	MSH0402 SendingFac_UnivID
Date message generated by reporting/sending lab	MSH0701 Date Time of Message	MSH0701 Date Time of Message
Patient Medical Record # (Unique identifier used by reporting facility if different from ordering facility)	PID0301 Patient ID_Internal	PID0301 Patient ID_Internal
Patient Current surname (last name)	PID0501 Patient Family Name	PID0501 Patient Family Name
Patient Current first name (given name)	PID0502 Patient Given Name	PID0502 Patient Given Name
Patient Date of Birth	PID0701 Date Time of Birth	PID0701 Date Time of Birth
Patient Current street address	PID1101 Patient Address_Street	PID1101 Patient Address_Street
Patient Current City of residence/location	PID1103 Patient Address_City	PID1103 Patient Address_City
Patient Current state/territory of residence/location	PID1104 Patient Address_State	PID1104 Patient Address_State
Patient Current zip code of residence	PID1105 Patient Address_Zip Code	PID1105 Patient Address_Zip Code

Ordering facility name	ORC2101 Order Fac Name Name	ORC2101 Order Fac Name Name
Ordering facility phone number	ORC2301 Order Fac Phone No	ORC2301 Order Fac Phone No
Lab specimen accession number	OBR0301 Filler Order Number	OBR0301 Filler Order Number
Specimen type (blood-include if Capillary or Venous for lead test, tissue)	ORB150102 Spec Source Test	ORB150102 Spec Source-Test
Body site coding system	OBR150403 Spec Srce Body Site NCS	OBR150403 Spec Srce Body Site NCS
Alternate test code	OBX0304 Obsvl DAItTt	OBX0304 Obsvl DAItTt
Alternate code	OBX0305 Obsvl DAItTt	OBX0305 Obsvl DAItTt
Lab test result – need specific and complete info	OBX0502 Text CE	OBX0502 Text CE
Date of observation/test	OBX1401 Obsv DtTm	OBX1401 Obsv DtTm

The remaining HL-7 fields are recommended.

- a. HL 7 version 2.4. The preferred format for electronic transmission of laboratory reports is HL 7 version 2.4 as supplemented and implemented and as specified by the Centers of Disease Control and Prevention standards. These standards can be found at the <http://www.cdc.gov>, National Electronic Disease Surveillance System.
 - b. HL 7 v2.3z will also be acceptable. File specification of HL 7 version 2.3z can be found at: <http://www.cdc.gov>.
2. American Standard Code for Information Interchange (ASCII). The following ASCII format is acceptable.

Column Starts	Column Ends	Field Length	Field Description	Required Field	Coding Information
1	30	30	Person Last Name	Yes	
31	60	30	Person First Name	Yes	
61	70	10	Person Middle Name		
71	75	5	Person Name Suffix		
76	90	15	Patient Identifier #1		
91	105	15	Patient Medical Record Number		

106	120	15	Prison Number		
121	135	15	Accession Number	Yes	
136	144	9	Person SSN		
145	152	8	Person Date of Birth	Yes	YYYYMMDD
153	153	1	Sex		1=Male, 2=Female, 9=Unk
154	155	2	Age of Person in Years		
156	156	1	Hispanic Ethnicity		1=Yes, 2=No, 9=Unk
157	157	1	Race: Ameri.Indian/Alaska Native		1=Yes
158	158	1	Race: Asian		1=Yes
159	159	1	Race: Black		1=Yes
160	160	1	Race: Pacific Islander		1=Yes
161	161	1	Race: White		1=Yes
162	162	1	Race: Unknown		1=Yes
163	197	35	Person Address #1		
198	232	35	Person Address #2		
233	267	35	Person City		
268	282	15	Person County		
283	284	2	Person State	Yes	
285	294	10	Person Zip Code		
295	344	50	Facility Name	Yes	
345	356	12	Facility Main Phone Number	Yes	
357	391	35	Facility Street Address #1		
392	426	35	Facility Street Address #2		
427	461	35	Facility City		
462	476	15	Facility County		
477	478	2	Facility State		
479	488	10	Facility Zip Code		
489	528	40	Facility Contact Person		
529	578	50	Laboratory Name	Yes	
579	588	10	Laboratory CLIA Code	Yes	
589	600	12	Laboratory Phone Number	Yes	
601	635	35	Laboratory Street Address #1		
636	670	35	Laboratory Street Address #2		
671	705	35	Laboratory City		

706	707	2	Laboratory State		
708	717	10	Laboratory Zip Code		
718	767	50	Laboratory Contact Person	Yes	
768	768	1	Specimen Sent to Reference Lab	Yes	1=Yes, 2=No
769	793	25	Test Code #1	Yes	* See Below
794	818	25	Test Manufacturer #1	Yes	
819	827	9	Test Result #1	Yes	Pos, Neg, High, Low, Detected, Undetected
828	837	10	Test Value #1	Yes	Quantity if applicable
838	845	8	Date Specimen Collected #1	Yes	YYYYMMDD
846	853	8	Date Specimen Tested #1	Yes	YYYYMMDD
854	863	10	Type of Specimen #1	Yes	Blood, Saliva, Urine, Other, Unknown
864	888	25	Test Code #2	Yes, if done	* See Below
889	913	25	Test Manufacturer #2	Yes, if done	
914	922	9	Test Result #2	Yes, if done	Pos, Neg, High, Low, Detected, Undetected
923	932	10	Test Value #2	Yes, if done	Quantity if applicable
933	940	8	Date Specimen Collected #2	Yes, if done	YYYYMMDD
941	948	8	Date Specimen Tested #2	Yes, if done	YYYYMMDD
949	958	10	Type of Specimen #2	Yes, if done	Blood, Saliva, Urine, Other, Unknown
959	983	25	Test Code #3	Yes, if done	* See Below
984	1008	25	Test Manufacturer #3	Yes, if done	
1009	1017	9	Test Result #3	Yes, if done	Pos, Neg, High, Low, Detected, Undetected
1018	1027	10	Test Value #3	Yes, if done	Quantity if applicable
1028	1035	8	Date Specimen Collected #3	Yes, if done	YYYYMMDD
1036	1043	8	Date Specimen Tested #3	Yes, if done	YYYYMMDD

1044	1053	10	Type of Specimen #3	Yes, if done	Blood, Saliva, Urine, Other, Unknown
1054	1078	25	Test Code #4	Yes, if done	* See Below
1079	1103	25	Test Manufacturer #4	Yes, if done	
1104	1112	9	Test Result #4	Yes, if done	Pos, Neg, High, Low, Detected, Undetected
1113	1122	10	Test Value #4	Yes, if done	Quantity if applicable
1123	1130	8	Date Specimen Collected #4	Yes, if done	YYYYMMDD
1131	1138	8	Date Specimen Tested #4	Yes, if done	YYYYMMDD
1139	1148	10	Type of Specimen #4	Yes, if done	Blood, Saliva, Urine, Other, Unknown
1149	1173	25	Test Code #5	Yes, if done	* See Below
1174	1198	25	Test Manufacturer #5	Yes, if done	
1199	1207	9	Test Result #5	Yes, if done	Pos, Neg, High, Low, Detected, Undetected
1208	1217	10	Test Value #5	Yes, if done	Quantity if applicable
1218	1225	8	Date Specimen Collected #5	Yes, if done	YYYYMMDD
1226	1233	8	Date Specimen Tested #5	Yes, if done	YYYYMMDD
1234	1243	10	Type of Specimen #5	Yes, if done	Blood, Saliva, Urine, Other, Unknown

*** Examples of Test Codes:**

HIV Antibodies: HIV-1 EIA, HIV-1/2 EIA, HIV-2 EIA, HIV-1 Western Blot, HIV-2 Western Blot, HIV-1 IFA, Rapid #1, Rapid #2, Other

HIV Detection: HIV-1 Proviral DNA, HIV-1RN-PCR (Qualitative), P24 Antigen, HIV-1 Culture, HIV-2 Culture, Other

HIV Viral Loads: RNA RT-PCR (Standard), RN RT-PCR (Ultra sensitive), bDNA, RNA NASBA, RNA Other

Immunologic: CD4 Absolute, CD4 Percent

3. Other Formats

Other formats may be accepted on a case-by-case basis with the approval of

Epidemiologic Services. Questions regarding data standards may be addressed by contacting Epidemiologic Services at (609) 984-5940 or PO Box 363, Trenton, NJ 08625-0363
Phone: (609) 984-5940

C. Mode of Electronic Transmission

The Department will work with individual laboratories to establish Secure File Transfer Protocol (SFTP) connections to transmit data. Other technologies such as Virtual Private Networks may be considered.

The Secure File Transfer Protocol is a program that uses the secure shell (SSH) program to transfer files. Unlike standard file transfer protocol, it encrypts both commands and data, thus preventing passwords and sensitive information from being transmitted in the clear over the network.

The Virtual Private Network is a network that is constructed by using the internet to connect nodes (Department and Laboratory Server). This will allow the data to be encrypted as well as ensure that only authorized users access the secure network.

All electronic interfaces shall be tested by the Department's laboratory staff prior to being sent to the production system. The test phase shall only be initiated once the laboratories have provided evidence that they have completed a list of diseases that they will be reporting along with the required LOINC and SNOMED tables.

During the first phase of testing, the laboratories can provide test data files to the Office of Information Technology Services to process into our test environment. Upon approval, the second phase of testing can be initialized by the laboratories to allow for the production and processing of data into the Department's test environment. Laboratories will provide hard copies of all test results (as they appear at the physicians' offices) to Epidemiologic Services. During this testing phase quality assurance will be conducted to verify the accuracy of the electronic data transmission. Upon completion of phase II testing, data will be put into production. However, hard copies may still be requested by Epidemiologic Services for a few months. Hard copy results can be discontinued if agreement is obtained by Epidemiologic Services and the specific Laboratory.

D. Contact Information

Division of HIV/AIDS Services
Epidemiologic Services
PO Box 363
Trenton, NJ 08625-0363

Phone: (609) 984-5940

E. References

<http://www.h17.org>

http://www.cdc.gov/phn/phn_news.html#h17