

Clinical Testing Molecular Diagnostics

Table 15. Molecular Diagnostics

Test Procedure	Specimens	Performed at	TAT (Days)
<i>Bordetella pertussis</i> and <i>parapertussis</i>	Nasopharyngeal swabs	Ch	3
Chlamydia/Gonorrhea	“See STD Section For Details” ¹	Ca, Ch, Sp	4
Herpes Simplex virus, types 1 and 2	Genital swabs	Ch	5
HIV Quantification	Plasma	Ch	7-10
Influenza virus, type A (subtypes H1, H3, and H5), type B and Influenza 2009(H1N1)pdm	Respiratory swabs	Ca, Ch, Sp	3
Norovirus, types G1 and G2	Stool specimens	Ca, Ch, Sp	5
Mumps virus	Parotid gland duct swab	Ch	3
Measles virus	Nasopharyngeal aspirate	Ch	3
<i>Mycobacterium tuberculosis</i> complex	Respiratory specimens only	Ch	3
Molecular Strain Typing	Culture isolates	Ch	4-7
Shiga toxin, types 1 and 2	Specimens and Referred Cultures	Ca, Ch, Sp	5
Identification of Cystic Fibrosis Mutations	“See Newborn Screening Section for Details”	Ch	3

¹See “Sexually Transmitted Diseases” for Instructions for Chlamydia/Gonorrhea Nucleic Acid Amplified Testing – Specimen Collection and Submission

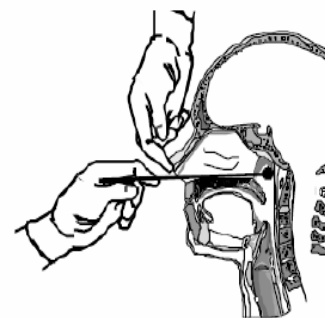
Instructions for *Bordetella pertussis/parapertussis* Detection by Real-time Polymerase Chain Reaction Specimen Collection and Submission

Instructions for Storage and Use of Transport Media

1. Store Regan-Lowe® transport media in the refrigerator until use.
2. Remove Regan-Lowe® transport media from refrigerator prior to use and let warm to room temperature.
2. After inoculating media with specimen, keep the specimen at room temperature.

Instructions for Nasopharyngeal Collection

1. Collect one nasopharyngeal Dacron® swab for each patient. **Note: Do not use calcium alginate swabs.**
2. Immobilize the patient’s head and gently pass the swab through the nostril into the nasopharyngeal cavity to the point of resistance; gently rotate.
3. Uncap the Regan-Lowe® transport agar tube and insert the swab into the medium; use scissors to crop the aluminum shaft so that the swab easily fits into the tube.
4. Leave the swab immersed in the media for transport and tighten the cap on the tube.
5. Label the specimen with the patient’s name/unique identifier, collection date and time of collection.
6. **Do not refrigerate specimen after collection.** Store at room temperature.



Information Required

Complete the Communicable Diseases Laboratory Test Requisition (IL1482-1039).

Test Methodology

Real-time polymerase chain reaction is used for the detection of *B. pertussis* (insertion sequence IS481) and *B. parapertussis* (IS 1001).

Rejection Criteria

Improperly filled out Communicable Disease Test Requisition (IL1482-1039); no patient identifier on specimen; broken specimen tube; improper specimen submitted

Instructions for Specimen Transport

1. a. By ground transport
 - i. Wrap specimen(s) individually in absorbent material.
 - ii. Place wrapped specimen(s) into a biohazard labeled bag and seal securely.
 - iii. Place the test requisition(s) in the biohazard bag outside pouch so that it does not come in contact with the specimen sealed inside the bag.
 - iv. Place the sealed biohazard bag and test requisition(s) inside the shipping container.

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- v. The shipping container must be rigid such as a cooler and labeled with the UN 3373 Biological Substance Category B marking.
- vi. Close securely.
- b. Commercial carrier by ground/air transport
 - i. Wrap specimen(s) individually in absorbent material.
 - ii. Place the wrapped specimen(s) inside a biohazard labeled 95 kPa bag and seal following the instructions on the bag.
 - iii. Place the test requisition(s) in the 95 kPa bag outside pouch so that it does not come in contact with the specimen sealed in the bag.
 - iv. Place the sealed 95 kPa bag and completed test requisitions(s) inside the outer shipping container and close securely.
 - v. Label the outer shipping container with the appropriate Illinois Department of Public Health laboratory address.
 - vi. Complete the return address section to include the name of the person shipping the package, business name and address and a business phone number.
 - vii. The shipping container must include the UN3373 Biological Substance Category B marking.
2. **Send the specimen as soon as possible, preferably overnight.** If using the U.S. Postal Service, use first class or express mail. If specimen is collected on Friday, store the specimen at room temperature and send it the following Monday.

Ship to:

Illinois Department of Public Health Laboratory
Molecular Unit
2121 W. Taylor St.
Chicago, IL 60612-7260
Phone: 312-793-4760
Fax: 312-793-1322

Instructions for Herpes Simplex Virus (Types 1 and 2) Detection by Real-time Polymerase Chain Reaction Specimen Collection and Submission

Instructions for Storage and Use of Starswab Multitrans Collection and Transport

1. Store Starswabs with Viral Transport Media (VTM) in the refrigerator until use.
2. Remove swabs from refrigerator prior to use. Do not use if media has expired.
3. After inoculating media with specimen, refrigerate immediately.

General Instructions for Specimen Collection

Collect specimens within three to seven days following the onset of symptoms. Avoid the use of disinfectants, soap, etc., on the infected area. The use of these may inactivate the virus. Whenever possible, collect the specimen from fresh vesicles. Lesions that have started to heal will contain fewer viral particles.

Vesicles

Aspirate the fluid using a sterile 25 to 27 gauge needle and a syringe; rinse into VTM. Using the Dacron® swab from the HSV collection kit, firmly swab the base of the lesions to obtain adequate numbers of infected cells. Avoid contaminating the swab with the surrounding area or blood. Place the swab in the VTM and tighten the cap.

Ulcerated Lesion

Remove the crust with a sterile needle and discard. Gently remove any pus with a sterile swab. Using the Dacron® swab from the HSV collection kit, vigorously swab the base of the lesion to collect infected cells. Avoid contaminating the swab with the surrounding area or blood. Place the swab in the VTM and tighten the cap. Label the specimen vial with the patient's name and collection date. Complete all the demographic information on the communicable disease laboratory test requisition form.

Information Required

Complete the Communicable Disease Laboratory Test Requisition (IL1482-1039).

Test Methodology

Real-time polymerase chain reaction is used for the detection of Herpes simplex virus type 1 (glycoprotein D gene) and type 2 (glycoprotein G gene).

Rejection Criteria

Improperly filled out Communicable Disease Test Requisition (IL1482-1039); no patient identifier on specimen; broken specimen tube; improper specimen submitted

Instructions for Specimen Transport

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1. Store specimen(s) at 4 C until shipping is possible. Specimens may be shipped at room temperature.
2. a. By ground transport
 - i. Wrap specimen(s) individually in absorbent material.
 - ii. Place wrapped specimen(s) into a biohazard labeled bag and seal securely.
 - iii. Place the test requisition(s) in the biohazard bag outside pouch so that it does not come in contact with the specimen sealed inside the bag.
 - iv. Place the sealed biohazard bag and test requisition(s) inside the shipping container.
 - v. The shipping container must be rigid such as a cooler and labeled with the UN 3373 Biological Substance Category B marking.
 - vi. Close securely.
- b. Commercial carrier by ground/air transport
 - i. Wrap specimen(s) individually in absorbent material.
 - ii. Place the wrapped specimen(s) inside a biohazard labeled 95 kPa bag and seal following the instructions on the bag.
 - iii. Place the test requisition(s) in the 95 kPa bag outside pouch so that it does not come in contact with the specimen sealed in the bag.
 - iv. Place the sealed 95 kPa bag and completed test requisitions(s) inside the outer shipping container and close securely.
 - v. Label the outer shipping container with the appropriate Illinois Department of Public Health laboratory address.
 - vi. Complete the return address section to include the name of the person shipping the package, business name and address and a business phone number.
 - vii. The shipping container must include the UN3373 Biological Substance Category B marking.
3. **Ship specimens by fastest delivery** to the attention of the Molecular Unit at the Chicago laboratory and include your return address. This can be accomplished by use of local courier, shipping corporations or U.S. Postal Service Overnight.

Ship to:

Illinois Department of Public Health Laboratory
Molecular Unit
2121 W. Taylor St.
Chicago, IL 60612-4224
Phone: 312-793-4760
Fax: 312-793-1322

Instructions for HIV-1 Quantification (Viral Load Test) Specimen Collection and Submission Specimen Requirements

HIV-1 viral load specimens only accepted from pre-approved submitters only. Plasma from whole blood collected in an EDTA (ethylenediaminetetraacetic acid or its salts) vacutainer transferred to a 2 mL screw-cap transport tube. The specimen must be shipped refrigerated or frozen with cold packs same day or overnight to the Illinois Department of Public Health laboratory in Chicago.

Information Required

Request HIV-1 viral load test requisitions from the Illinois Department of Public Health's Molecular Laboratory, 312-793-1068. Include provider code; specimen ID number; EDTA collection confirmation with initials; collection time and date with initials; plasma separation and transfer date and time with initials; plasma frozen time and date with initials.

Suggested Information

Address; birth date; chart number; attending physician; medications; diagnosis

Collection Materials

HIV-1 monitor test kit. See Appendix C.

Test Includes

Number of HIV-1 RNA copies detected/mL of plasma.

Test Methodology

Roche Cobas AmpliPrep/Cobas TaqMan HIV-1 Test. Dynamic reporting range of 48-10,000,000 HIV-1 RNA copies/mL (FDA Cleared Test).

Interfering Substances/Conditions

Heparin (inhibits PCR); multiple freeze/thaw cycles (more than three) reduce viral load counts by releasing RNAses from the blood cells).

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Criteria for Rejection

Specimen is not plasma from an EDTA vacutainer; plasma not separated within six hours of collection and stored at 2 C to 25 C; plasma stored at room temperature for more than 24 hours; plasma stored refrigerated (2 C to 8 C) for more than five days; plasma frozen at -20 C to -80 C and thawed more than three times; specimen is not labeled; specimen lacks a provider code.

Specimens With Incomplete Documentation

These specimens could be tested if the documentation is provided by **fax** in a timely manner; otherwise the specimen must be rejected.

1. Specimen is without a requisition. Requisition is without the specimen number.
2. Requisition is without the collection time, date and technologists initials.
3. Requisition is without the separation time, date and technologists initials.
4. Requisition is without the plasma freezing time, date and technologists initials.

Instructions for Specimen Transport

1. Store specimen(s) at -20 C until shipping. Ship specimens with ice packs overnight.
2.
 - a. By ground transport
 - i. Wrap specimen(s) individually in absorbent material.
 - ii. Place wrapped specimen(s) into a biohazard labeled bag and seal securely.
 - iii. Place the test requisition(s) in the biohazard bag outside pouch so that it does not come in contact with the specimen sealed inside the bag.
 - iv. Place the sealed biohazard bag and test requisition(s) inside the shipping container.
 - v. The shipping container must be rigid such as a cooler and labeled with the UN 3373 Biological Substance Category B marking.
 - vi. Close securely.
 - b. Commercial carrier by ground/air transport
 - i. Wrap specimen(s) individually in absorbent material.
 - ii. Place the wrapped specimen(s) inside a biohazard labeled 95 kPa bag and seal following the instructions on the bag.
 - iii. Place the test requisition(s) in the 95 kPa bag outside pouch so that it does not come in contact with the specimen sealed in the bag.
 - iv. Place the sealed 95 kPa bag and completed test requisitions(s) inside the outer shipping container and close securely.
 - v. Label the outer shipping container with the appropriate Illinois Department of Public Health laboratory address.
 - vi. Complete the return address section to include the name of the person shipping the package, business name and address and a business phone number.
 - vii. The shipping container must include the UN3373 Biological Substance Category B marking.
3. **Ship specimens by fastest delivery** to the attention of the Molecular Unit at the Chicago laboratory and include your return address. This can be accomplished by use of local courier, shipping corporations or U.S. Postal Service Overnight.

Ship to:

Illinois Department of Public Health Laboratory

Molecular Unit

2121 W. Taylor St.

Chicago, IL 60612-4224

Phone: 312-793-4760

Fax: 312-793-1322

Instructions for Influenza virus type A: Human subtypes H1, H3; Avian Subtype H5; 2009A(H1N1)pdm (pandemic) by Real-time Reverse Transcriptase Polymerase Chain Reaction - Surveillance
Instructions for Human Influenza type B by Real-time Reverse Transcriptase Polymerase Chain Reaction - Surveillance

Specific Requirements for requesting Influenza testing

This test is performed for influenza **surveillance** only on specimens and culture isolates. The test is not performed for individual clinics for patient management.

Specific Requirements for requesting Avian Influenza (H5N1) testing

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Patients must demonstrate specific clinical presentation and travel history before testing can be performed. Contact your local health department for more information.

Information Required

Complete the Communicable Diseases Laboratory Test Requisition 1482-1039.

Instructions for Storage and Use of Viral Transport Collection Kit

1. Store swabs with Viral Transport Media (VTM) in the refrigerator until use.
2. Remove swabs from refrigerator prior to use. Do not use if media has expired.
3. After inoculating media with specimen, refrigerate immediately.

Instructions for Specimen Collection

1. Human and Avian Influenza; **Only** nasopharyngeal swabs and nasal swabs are acceptable
2. 2009A(H1N1)pdm; Collect nasopharyngeal swabs and nasal swabs, nasal aspirates, nasal washes, dual nasopharyngeal/throat swabs, bronchoalveolar lavages, tracheal aspirates, bronchial washes.
3. Collect specimens one-three days after onset of symptoms.
4. Transfer swabs into a labeled VTM tube and store in the refrigerator until they are shipped cold (with ice packs) to the laboratory. See the Virology section of this manual for more details.
5. Contact the laboratory for autopsy specimens.

General Instructions for Culture Isolate Submission

See the Virology section of this manual for details on the collection and shipment of culture isolates.

Test Methodology

A real-time reverse transcriptase polymerase chain reaction (RT-PCR) assay is used for the identification of Influenza, types A and B. If Influenza type A is detected, reflex RT-PCR assays are performed to detect sub-types H1, H3, and if warranted H5.

Rejection Criteria

Improperly filled out Communicable Disease Test Requisition (1482-1039); no patient identifier on specimen; broken specimen tube; improper specimen submitted.

Instructions for Specimen Transport

1. Store specimen(s) at 4°C until shipping is possible. Ship specimens with ice packs.
2.
 - a. By ground transport
 - i. Wrap specimen(s) individually in absorbent material.
 - ii. Place wrapped specimen(s) into a biohazard labeled bag and seal securely.
 - iii. Place the test requisition(s) in the biohazard bag outside pouch so that it does not come in contact with the specimen sealed inside the bag.
 - iv. Place the sealed biohazard bag and test requisition(s) inside the shipping container.
 - v. The shipping container must be rigid such as a cooler and labeled with the UN 3373 Biological Substance Category B marking.
 - vi. Close securely.
 - b. Commercial carrier by ground/air transport
 - i. Wrap specimen(s) individually in absorbent material.
 - ii. Place the wrapped specimen(s) inside a biohazard labeled 95 kPa bag and seal following the instructions on the bag.
 - iii. Place the test requisition(s) in the 95 kPa bag outside pouch so that it does not come in contact with the specimen sealed in the bag.
 - iv. Place the sealed 95 kPa bag and completed test requisitions(s) inside the outer shipping container and close securely.
 - v. Label the outer shipping container with the appropriate Illinois Department of Public Health laboratory address.
 - vi. Complete the return address section to include the name of the person shipping the package, business name and address and a business phone number.
 - vii. The shipping container must include the UN3373 Biological Substance Category B marking.
3. Ship specimens by fastest delivery to the attention of the Molecular Unit at the Chicago laboratory and include your return address. This can be accomplished by use of local courier, shipping corporations or U.S. Postal Service-Overnight.

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Ship to:

Illinois Department of
Public Health Laboratory
Molecular Unit
1155 S. Oakland Ave.
Carbondale, IL 62901
Phone: 618-457-5131
Fax: 618-457-6995

Illinois Department of
Public Health Laboratory
Molecular Unit
2121 W. Taylor St.
Chicago, IL 60612-4224
Phone: 312-793-4760
Fax: 312-793-1322

Illinois Department of
Public Health Laboratory
Molecular Unit
825 N. Rutledge St.
Springfield, IL 62702-4910
Phone: 217-782-6562
Fax: 217-524-7924

Instructions for Detection of Measles Virus by Real-time Reverse Transcriptase Polymerase Chain Reaction – Specimen Collection and Submission

Instructions for Collection

(Submission kits can be acquired by calling Immunization Surveillance staff at 217-785-1455).

1. The preferred specimen is a nasopharyngeal aspirate. Nasopharyngeal and throat swabs are acceptable. Collect specimen as soon as possible after onset of the rash.
2. The nasal wash (nasopharyngeal aspirate) is obtained using a syringe attached to a small piece of plastic tubing and about 3 mL of sterile saline. After placing saline in the nose, as much as possible is aspirated and added to the specimen tube containing VTM.
3. Do not use calcium alginate swabs.
4. Label the outside of the tube with the patient's name and collection date. Refrigerate (do not freeze) the specimen until shipping. Complete all the demographic information on the Communicable Disease Laboratory Test Requisition (1482-1039) available at <http://www.idph.state.il.us/about/laboratories/index.htm>.

Information Required

Completed Communicable Disease Laboratory Test Requisition (IL1482-1039)

Test Methodology

Real-time reverse transcriptase polymerase chain reaction for the detection of the Measles N gene.

Rejection Criteria

Improperly filled out Communicable Disease Laboratory Test Requisition (IL1482-1039); no patient identifier on specimen; broken specimen tube; improper specimen submitted

Instructions for Specimen Transport

1.
 - a. By ground transport
 - i. Wrap specimen(s) individually in absorbent material.
 - ii. Place wrapped specimen(s) into a biohazard labeled bag and seal securely.
 - iii. Place the test requisition(s) in the biohazard bag outside pouch so that it does not come in contact with the specimen sealed inside the bag.
 - iv. Place the sealed biohazard bag and test requisition(s) inside the shipping container.
 - v. The shipping container must be rigid such as a cooler and labeled with the UN 3373 Biological Substance Category B marking.
 - vi. Close securely.
 - b. Commercial carrier by ground/air transport
 - i. Wrap specimen(s) individually in absorbent material.
 - ii. Place the wrapped specimen(s) inside a biohazard labeled 95 kPa bag and seal following the instructions on the bag.
 - iii. Place the test requisition(s) in the 95 kPa bag outside pouch so that it does not come in contact with the specimen sealed in the bag.
 - iv. Place the sealed 95 kPa bag and completed test requisitions(s) inside the outer shipping container and close securely.
 - v. Label the outer shipping container with the appropriate Illinois Department of Public Health laboratory address.
 - vi. Complete the return address section to include the name of the person shipping the package, business name and address and a business phone number.
 - vii. The shipping container must include the UN3373 Biological Substance Category B marking.
2. **The specimen(s) should be received at the laboratory within 48 hours of collection.** Avoid overnight shipping of specimens over weekends or holidays. In these instances, maintain specimen(s) under refrigeration until Monday (or the next business day), then ship with cold packs.

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3. **Ship specimens by fastest delivery** to the attention of the Molecular Unit at the Chicago laboratory. This can be accomplished by use of local courier, shipping corporations or U.S. Postal Service Overnight.

Ship to:

Illinois Department of Public Health Laboratory
Molecular Unit
2121 W. Taylor St.
Chicago, IL 60612-4224
Phone: 312-793-1068
Fax: 312-793-0077

Instructions for Detection of Mumps Virus by Real-time Reverse Transcriptase Polymerase Chain Reaction – Specimen Collection and Submission

Instructions for Collection

(Submission kits can be acquired by calling Immunization Surveillance staff at 217-785-1455).

1. The preferred specimen is a parotid gland duct swab collected within nine days from the onset of symptoms.
2. Massage the parotid (salivary) glands for 30 seconds.
3. The swab specimen needs to be collected from the buccal cavity which is near the upper rear molars, between the cheek and teeth. Remove the swab from its protective sheath and sweep it between the cheek and gum near the upper molar to the lower molar area.
4. Return the swab into the sheath.
5. Label the outside of the sheath with the patient's name and collection date. Refrigerate (do not freeze) the specimen until shipping. Complete all the demographic information on the Communicable Disease Laboratory Test Requisition (IL1482-1039) available at <http://www.idph.state.il.us/about/laboratories/index.htm>.

Information Required

Completed Communicable Disease Laboratory Test Requisition (IL1482-1039)

Test Methodology

Real-time reverse transcriptase polymerase chain reaction for the detection of Mumps viral genes S and H

Rejection Criteria

Improperly filled out Communicable Disease Laboratory Test Requisition (IL1482-1039); no patient identifier on specimen; broken specimen tube; improper specimen submitted

Instructions for Specimen Transport

1. a. By ground transport
 - i. Wrap specimen(s) individually in absorbent material.
 - ii. Place wrapped specimen(s) into a biohazard labeled bag and seal securely.
 - iii. Place the test requisition(s) in the biohazard bag outside pouch so that it does not come in contact with the specimen sealed inside the bag.
 - iv. Place the sealed biohazard bag and test requisition(s) inside the shipping container.
 - v. The shipping container must be rigid such as a cooler and labeled with the UN 3373 Biological Substance Category B marking.
 - vi. Close securely.
- b. Commercial carrier by ground/air transport
 - i. Wrap specimen(s) individually in absorbent material.
 - ii. Place the wrapped specimen(s) inside a biohazard labeled 95 kPa bag and seal following the instructions on the bag.
 - iii. Place the test requisition(s) in the 95 kPa bag outside pouch so that it does not come in contact with the specimen sealed in the bag.
 - iv. Place the sealed 95 kPa bag and completed test requisitions(s) inside the outer shipping container and close securely.
 - v. Label the outer shipping container with the appropriate Illinois Department of Public Health laboratory address.
 - vi. Complete the return address section to include the name of the person shipping the package, business name and address and a business phone number.
 - vii. The shipping container must include the UN3373 Biological Substance Category B marking.

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2. **The specimen(s) should be received at the laboratory within 48 hours of collection.** Avoid overnight shipping of specimens over weekends or holidays. In these instances, maintain specimen(s) under refrigeration until Monday (or the next business day), then ship with cold packs.
3. **Ship specimens by fastest delivery** to the attention of the Molecular Unit at the Chicago laboratory. This can be accomplished by use of local courier, shipping corporations or U.S. Postal Service Overnight.

Ship to:

Illinois Department of Public Health Laboratory
Molecular Unit
825 N. Rutledge St.
Springfield, IL 62702-4910
Phone: 217-782-6562
Fax: 217-557-2618

Illinois Department of Public Health Laboratory
Molecular Unit
2121 W. Taylor St.
Chicago, IL 61612-4224
Phone: 312-793-4760
Fax: 312-793-1322

Instructions for Detection of Mycobacterium Tuberculosis Complex by Real-time Polymerase Chain Reaction – Specimen Collection and Submission

Specimen Requirements

This test is validated for respiratory specimens only, including sputum (induced or expectorated), bronchial specimens (bronchoalveolar lavage or bronchial aspirate) and tracheal aspirate. Specimens are sent directly to the Mycobacterium laboratory. See the “Mycobacterium” section in this manual for more details.

Information Required

Completed Communicable Diseases Laboratory Test Requisition IL482-1039; include provider code, patient’s full name, specimen source and date of collection

Materials Required

Mycobacteriology kit and a signed Memorandum of Understanding for non-mandated providers

Test Includes

Detection of presence (positive) or lack of presence (negative) of Mycobacterium tuberculosis complex DNA (Note: The real-time polymerase chain reaction assay is specific for, but does not differentiate among members of the M. tuberculosis complex.)

Criteria for Rejection

1. Specimen without submission form
2. Incomplete/inaccurate information on submission form
3. Specimen other than sputum (induced or expectorated), bronchial specimens, lavages, or bronchial aspirates), tracheal aspirates
4. Specimen from previous amplified test “positive” (without written justification from physician)
5. Patient specimens with a “negative” real-time polymerase chain reaction result will only be tested three times in a 90-day period.
6. Specimens not stored at 2 C – 8 C before transport
7. Specimens older than 72 hours
8. Specimen not labeled
9. Grossly bloody specimen

Test Method

The real-time polymerase chain reaction (PCR) assay used by the Illinois Department of Public Health molecular laboratory was adapted from a procedure published by Desjardin et. al., J. Clin. Micro. 36; 1964-1968, 1998. This PCR test targets the IS6110 repetitive to ensure maximal sensitivity and make it highly specific for the M. tuberculosis complex. This PCR assay was adapted for respiratory specimens only.

Interfering Substances/Conditions

“Grossly” bloody specimens; specimens not stored at 2 C – 8 C before transport; specimens older than 72 hours

Instructions for Detection of Shigatoxin (Types 1 and 2) by Real-time Polymerase Chain Reaction - Specimen Collection and Submission

Specimen Requirements

Test is performed on eight to 24 hour enriched cultures from specimens (stool, Cary Blair swab, Cary Blair vial) or referred cultures. The test cannot be performed directly from stool. See the Enterics section of this manual for more detailed information on specimen collection and rejection criteria.

Information Required

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Complete the Communicable Diseases Laboratory Test Requisition (IL1482-1039).

Testing Methodology

Real-time polymerase chain reaction assay for the detection of Shiga toxin DNA (types 2 and 3).

Instructions for Specimen Transport

Specimens are sent directly to the Enterics laboratory. See the Enterics section of this manual for detailed information.

Rejection Criteria

Improperly filled out Communicable Disease Test Requisition (IL1482-1039); no patient identifier on specimen; broken specimen tube; improper specimen submitted.

Availability

Test is performed in the Carbondale, Chicago and Springfield laboratories.