Saginaw County
HEALTH DEPARTMENT
Caring experts, advocates & champions.
For health. For everyone.

Title: Specimen Collection: GC Culture using Modified Thayer Martin Plates

Index: STI 3

Author(s): Tammy Theisen

Version: 1.6

Authorized by: Marty Soehnlen

Authorization date: 30-Nov-2023

Next review date: 16-Dec-2025

Organizational Unit: Saginaw County Regional Laboratory

Section: High Complexity Testing

Location: High Complexity Testing

Introduction and Scope: Specimen Collection: GC Culture using Modified Thayer Martin Plates

Introduction and Scope

Adopted in 1982. Submitted to iPassport 2016

Title: Specimen Collection for GC Culture using Modified Thayer Martin Plates and Direct Gram Stain:

Adopted 1982……..Revised November 2023

A. Patient Preparation Instructions:

Inform the patient that the test is used to diagnose gonorrhea, a sexually transmitted disease. The patient should have the guarantee of confidentiality and informed consent for the testing. Explain the collection procedure and that it may be slightly uncomfortable. Inform the patient that gonorrhea is generally only transmitted via sexual contact (excluding vaginitis in children) and that any mucous membrane (i.e. urethra, cervix, pharynx, and anal canal) is a potential reservoir of this pathogen; and in this way, one may possibly ascertain whether a specimen should be obtained from additional sources. Clinicians should also ascertain that the patient is not currently on antibiotic therapy and has not urinated for at least one hour prior to testing. If the patient is a female, she should not have used vaginal medication or used a douche for at least 24 hours.

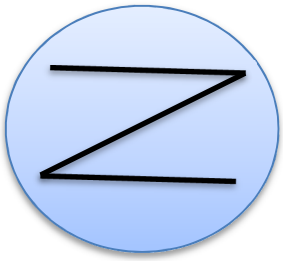
B. Specimen Collection and Sample Preparation:

1. Endocervical Canal:
   Use a speculum moistened with warm water or a sterile non-bacteriostatic saline solution to view the cervix. Other lubricants should not be used, as they may be toxic to gonococci. Insert a sterile cotton swab 2 – 3 cm into the cervical canal. It is not necessary to cleanse the cervix. Rotate the swab for 5 – 10 seconds to permit absorption of the exudate. Culture may be taken at any stage of the menstrual cycle, as menstruation will not adversely affect recovery rates. For culture, inoculate a MTM plate as described in B-6.
2. Urethra:
   The urethra of males is stripped or 'milked' toward the orifice to express exudate. If no exudate is obtained, vertically compress the meatus to open the distal urethra and insert a thin calcium alginate swab on an aluminum shaft 2 – 3 cm with a rotary motion. Discharge may be obtained from females by massaging the urethra against the pubic symphysis. If no discharge is evident, the same technique as descried for males may be used.
   a) For MTM culture, inoculate MTM plate as described in B-6.
   b) For a direct gram stain sample,
      1. Use a clean glass slide, preferably with a frosted end. Label the frosted side of the slide with last name, first name and date.
      2. Gently roll the swab across the clean microscope slide taking care not to damage cells. It is best to use a saline solution for the aliquot, but sterile water is acceptable.
3. Vagina:
   Insert the speculum. Obtain the specimen from the posterior vaginal vault with a sterile cotton swab, allowing a few seconds for absorption of material. If the hymen is intact, a swab of the vaginal orifice will suffice. Inoculate MTM plate as described in B-6.
4. Oropharynx:

Rub a sterile cotton swab over the posterior pharynx and tonsillar crypts. Inoculate MTM plate as described in B-6.

5. Rectum (anal canal):
   Have the patient spread the buttocks and bear down slightly. Insert a sterile cotton swab approximately 3 cm into the anal canal while exerting lateral pressure to any fecal mass. Rotate the swab for approximately 10 seconds to sample crypts just inside the anal ring. Inoculate MTM plate as described in B-6.
6. Inoculate specimens onto Modified Thayer-Martin (MTM) plate immediately. Ensure the plate is room temperature. Firmly roll the swab over one-fourth of the plate, making sure that the entire surface of the swab comes in contact with the medium. Using a Z patter, as in diagram A-1 is recommended.
7. Label the plate, on the media side, with name (last name, first name), date collected and clinic.
8. Fill out a test requisition form completely. Ensure the information on the plate matches the test requisition form unequivocally.
9. The direct gram stains are considered stat. They should be delivered to the laboratory as soon as possible. The laboratory will make every effort to have results back to the clinic within 30 minutes.
10. Place inoculated plate, media side up, in the CO_2 incubator. If CO_2 incubator is not available, place inoculated plate into a candle jar, light the candle. Place the lid on the can to induce proper atmospheric condition. Place this candle jar in a 35°C ± 1°C incubator.

Diagram A-1



C. Handling Conditions:

Handle all specimens with universal precautions

Inoculated plates need to be taken to the laboratory within 6 hours of collection. When carrying the specimens down to the laboratory, place them in a container that is labeled ‘biohazardous”.

D. Criteria for Rejection:

1. When the information on the sample and test requisition does not match exactly, reject the specimen. CLIA requires an exact match.
2. When the media that has been inoculated is dried and/or cracked, reject specimen.
3. When MTM agar is expired, reject specimen.

4. When MTM culture specimen is over 2 hours old and has not been placed in CO_2 environment (candle jar) and/or CO_2 35°±C ±1° incubator, reject specimen.
5. When sample is unlabeled.

E. References:

Wentworth, Bertinna, Ph.D et al. 1991. Laboratory Methods for the Diagnosis of Sexually Transmitted Diseases. American Public Health Associate. St. Mary's Press. USA.

For revisions: Z:\Lab Procedures\GC Culture collection appendix A.docx

Links

Please note: links are only correct at time of printing

Controlled Document links:

Document Revision History

Compulsory Review Completed on 16-Dec-2024 09:12 by Tammy Theisen

NO changes at this time. This document was originally due for review on 30-Nov-2024.

Completed Review Feedback on 25-Nov-2024 09:27 by Tammy Theisen

Tammy Theisen completed task, ""

Round 1 of reviews started on 30-Oct-2024 22:30 by Account Administrator (iPassport Support)

Review Feedback tasks were assigned to the following users: Tammy Theisen
This review is to be completed by 30-Nov-2024

Superseded on 30-Nov-2023 15:32 by Marty Soehnlen

Version 1.5 superseded by version 1.6

Document Published on 30-Nov-2023 15:32 by Marty Soehnlen

The document was published and is ready to be used.

Authorised on 30-Nov-2023 15:32 by Marty Soehnlen

Authorised version 1.6 - More detail on direct gram stain specimen collection was needed. This was added.. The following users will be notified when a review is due for this document: Tammy Theisen Document was scheduled to be released on 2023-11-30 The document was originally due for review on 21-Aug-2024

Authorisation Approved on 30-Nov-2023 15:32 by Marty Soehnlen

The user Approved the authorisation request.

Set Pending Authorisation on 30-Nov-2023 15:25 by Tammy Theisen

Document was set as Pending Authorisation and authorisation requests were sent to: Marty Soehnlen

Authorisation requested on 30-Nov-2023 15:25 by Tammy Theisen

Authorisation request sent to Marty Soehnlen by Tammy Theisen on 30-Nov-2023 15:25.

Draft Created on 30-Nov-2023 15:21 by Tammy Theisen

Reason: Need to add more detail for direct gram stain collection.

Document Published on 21-Aug-2023 10:11 by Marty Soehnlen

The document was published and is ready to be used.

Authorisation Approved on 21-Aug-2023 10:11 by Marty Soehnlen

The user Approved the authorisation request.

Authorised on 21-Aug-2023 10:11 by Marty Soehnlen

Authorised version 1.5 - . The following users will be notified when a review is due for this document: Tammy Theisen Document was scheduled to be released on 2023-08-21 The document was originally due for review on 01-Aug-2023

Superseded on 21-Aug-2023 10:11 by Marty Soehnlen

Version 1.4 superseded by version 1.5

Set Pending Authorisation on 21-Aug-2023 09:11 by Tammy Theisen

Document was set as Pending Authorisation and authorisation requests were sent to: Marty Soehnlen

Authorisation requested on 21-Aug-2023 09:11 by Tammy Theisen

Authorisation request sent to Marty Soehnlen by Tammy Theisen on 21-Aug-2023 09:11.

Completed Review Feedback on 21-Aug-2023 09:08 by Tammy Theisen

Tammy Theisen completed task, "no changes need, just new version for new signature "

Round 1 of reviews started on 01-Jul-2023 22:30 by Account Administrator (iPassport Support)

Review Feedback tasks were assigned to the following users: Tammy Theisen
This review is to be completed by 01-Aug-2023

Draft Created on 10-Oct-2022 11:25 by Tammy Theisen

Reason: Needed to remove Margarete's name, added reagent acquisition process.

Superseded on 12-Aug-2022 13:02 by Marty Soehnlen

Version 1.3 superseded by version 1.4

Document Published on 12-Aug-2022 13:02 by Marty Soehnlen

The document was published and is ready to be used.

Authorised on 12-Aug-2022 13:02 by Marty Soehnlen

Authorised version 1.4 - . The following users will be notified when a review is due for this document: Tammy Theisen
Document was scheduled to be released on 2022-08-12 The document was originally due for review on 28-Jun-2022

Authorisation Approved on 12-Aug-2022 13:02 by Marty Soehnlen

The user Approved the authorisation request.

Completed Review Feedback on 02-Aug-2022 15:45 by Tammy Theisen

Tammy Theisen completed task, "Hi. I asked Margaret to review this procedure and she added the CO2 incubator at the end. I think I asked you to authorize that one. But reading this, it is OK just the way it is. "

Set Pending Authorisation on 01-Aug-2022 10:47 by Tammy Theisen

Document was set as Pending Authorisation and authorisation requests were sent to: Marty Soehnlen

Authorisation requested on 01-Aug-2022 10:47 by Tammy Theisen

Authorisation request sent to Marty Soehnlen by Tammy Theisen on 01-Aug-2022 10:47.

Draft Created on 01-Aug-2022 10:43 by Tammy Theisen

Reason: Updated form to include CO2 incubator

Round 1 of reviews started on 28-May-2022 22:30 by Account Administrator (iPassport Support)

Review Feedback tasks were assigned to the following users: Tammy Theisen
This review is to be completed by 28-Jun-2022

Superseded on 28-Jun-2021 13:02 by Marty Soehnlen

Version 1.2 superseded by version 1.3

Authorised on 28-Jun-2021 13:02 by Marty Soehnlen

Authorised version 1.3 - . The following users will be notified when a review is due for this document: Tammy Theisen
Document was scheduled to be released on 2021-06-28 The document was originally due for review on 01-Sep-2021

Authorisation requested on 28-Jun-2021 12:33 by Tammy Theisen

Authorisation request sent to Marty Soehnlen by Tammy Theisen on 28-Jun-2021 12:33.

Draft Created on 28-Jun-2021 12:33 by Tammy Theisen

Reason: Time for review by Lab Director

Superseded on 02-Sep-2020 10:11 by Marty Soehnlen

Version 1.1 superseded by version 1.2

Authorised on 02-Sep-2020 10:11 by Marty Soehnlen

Authorised version 1.2 - . The following users will be notified when a review is due for this document: Tammy Theisen, Tammy Theisen Document was scheduled to be released on 2020-09-02 The document was originally due for review on 04-Sep-2020

Authorisation requested on 02-Sep-2020 09:57 by Tammy Theisen

Authorisation request sent to Marty Soehnlen by Tammy Theisen on 02-Sep-2020 09:57.

Draft Created on 02-Sep-2020 09:54 by Tammy Theisen

Reason: Due for review, no changes needed

Completed Review Feedback on 02-Sep-2020 09:53 by Tammy Theisen

Tammy Theisen completed task, ""

Review Feedback Requested on 04-Aug-2020 22:30 by Not Set

Review Feedback tasks were assigned to the following users: Tammy Theisen This review is to be completed by 04-Sep-2020

Superseded on 07-Sep-2018 09:26 by Marty Soehnlen

Version 1.0 superseded by version 1.1

Authorised on 07-Sep-2018 09:26 by Marty Soehnlen

Authorised version 1.1 - . The following users will be notified when a review is due for this document: Tammy Theisen, Tammy Theisen The document was originally due for review on 26-May-2019

Authorisation requested on 04-Sep-2018 10:40 by Tammy Theisen

Authorisation request sent to Marty Soehnlen by Tammy Theisen on 04-Sep-2018 10:40.

Draft Created on 04-Sep-2018 10:37 by Tammy Theisen

Reason: No revision, need new lab director authorization

Authorised on 01-Jun-2017 15:44 by Li-Sheng Chen (Inactive)

Authorised version 1.0 - Uploaded this procedure into iPassport. No changes have been made to this specimen collection procedure.. The following users will be notified when a review is due for this document: Tammy Theisen

Authorisation requested on 26-May-2017 14:18 by Tammy Theisen

Authorisation request sent to Li-Sheng Chen by Tammy Theisen on 26-May-2017 14:18.

Reverted to Draft on 26-May-2017 14:14 by Tammy Theisen

Document was reverted to draft and all authorisation requests were removed.

Authorisation requested on 14-Apr-2016 14:24 by Tammy Theisen

Authorisation request sent to Janice MatthewsGreer by Tammy Theisen on 14-Apr-2016 14:24.

Creation on 14-Apr-2016 14:21 by Tammy Theisen

New SOP created

Authorisation

This document was securely signed and authorised by:

Marty Soehnlen: 30-Nov-2023 15:32