Created: 9/11/2024
Updated: 9/11/2024

Bacterial Identification – Aerobic Information Sheet

Overview

MDL Test Name

Bacterial Identification – Aerobic

MDL Test Code

BAC_IDA

Ask at Order Questions

Source

Specimen Source

Pure culture isolate on suitable agar (solid) medium; slant or plate

Specimen Requirements

Container/Tube

Suitable agar (solid) medium for isolate submitted. It can be slant or sealed plate.

Specimen Volume (minimum)

Pure culture with viable growth must be submitted

Sample Stability Time

Stability varies with the organism and transport system; usually up to 48 hours at ambient temperatures but fastidious organisms should be sent promptly.

Transport/Storage Conditions

Ambient (20 – 25°C)

Patient Preparation / Collection Instructions

N/A

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

2 – 4 days

Specimen Retention Time

7 days

Method Description

Identification methods may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels. Genus and species are reported on aerobic bacterial isolates whenever possible.

Reference Values

Identification of organism

Cautions

- Testing cannot be performed on mixed cultures, submitted isolate must be pure.
- Testing ability depends on the viability of the organism submitted.
- Verify labeled appropriately and securely sealed for transport to avoid breaking or leakage. Recommend securing the lid with parafilm or similar material. Place in an individually sealed bag.
- MDL does not perform identification testing of possible agents of bioterrorism and/or identification confirmation of Salmonella or Shigella species. Please reference your local state health department on how to proceed with these isolates.

WSU Molecular Diagnostics Laboratory
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Created: 9/13/2024
Updated: 9/13/2024

Bacterial Identification – Anaerobic Information Sheet

Overview

MDL Test Name

Bacterial Identification – Anaerobic

MDL Test Code

BAC_IDN

Ask at Order Questions

Source

Specimen Source

Pure culture isolate on suitable agar (solid) medium; slant or plate

Specimen Requirements

Container/Tube

Suitable agar (solid) medium for isolate submitted. Submit a sealed plate in an anaerobic transport bag to maintain viability.

Specimen Volume (minimum)

Pure culture with viable growth must be submitted

Sample Stability Time

Stability varies with organism and transport system; usually up to 48 hours at ambient temperatures but fastidious organisms should be sent promptly.

Transport/Storage Conditions

Ambient (20 – 25°C)

Patient Preparation / Collection Instructions

N/A

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

2 – 4 days

Specimen Retention Time

7 days

Method Description

Identification methods may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels. Genus and species are reported on aerobic bacterial isolates whenever possible.

Reference Values

Identification of organism.

Cautions

- Testing cannot be performed on mixed cultures, the submitted isolate must be pure.
- Testing ability depends on the viability of the organism submitted.
- Verify labeled appropriately and securely sealed for transport to avoid breaking or leakage. Recommend securing the lid with parafilm or similar material. Place in an individually sealed bag and then in an anaerobic transport bag.

WSU Molecular Diagnostics Laboratory
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Created: 9/11/2024
Updated: 9/11/2024

Bacterial Identification and Susceptibility – Aerobic Information Sheet

Overview

MDL Test Name

Bacterial Identification and Susceptibility – Aerobic

MDL Test Code

BAC_IDSUSA

Ask at Order Questions

Source

Specimen Source

Pure culture isolate on suitable agar (solid) medium; slant or plate

Specimen Requirements

Container/Tube

Suitable agar (solid) medium for isolate submitted. It can be slant or sealed plate.

Specimen Volume (minimum)

Pure culture with viable growth must be submitted

Sample Stability Time

Stability varies with the organism and transport system; usually up to 48 hours at ambient temperatures but fastidious organisms should be sent promptly.

Transport/Storage Conditions

Ambient (20 – 25°C)

Patient Preparation / Collection Instructions

N/A

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

2 – 4 days

Specimen Retention Time

7 days

Method Description

- Identification methods may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels. Genus and species are reported on aerobic bacterial isolates whenever possible.
- Susceptibility testing may include minimal inhibitory concentration (MIC) (broth microdilution or gradient strip diffusion) or disc diffusion.
- NOTE: Susceptibility testing is performed depending on source and identification. If the source and identification do not warrant susceptibility testing per CLSI guidelines, MDL will notify the client prior to continuing with testing.

Reference Values

- Identification of organism.
- Susceptibility results are reported as minimal inhibitory concentration (MIC) in µg/mL, or zone size (in mm) for disc diffusion. Breakpoints are used to categorize an organism as susceptible, susceptible-dose dependent, intermediate, resistant, or nonsusceptible according to either U.S. Food and Drug Administration (FDA) and/or Clinical Laboratory Standards Institute (CLSI).

Cautions

- Testing cannot be performed on mixed cultures, submitted isolate must be pure.
- Testing ability depends on the viability of the organism submitted.
- Verify labeled appropriately and securely sealed for transport to avoid breaking or leakage. Recommend securing the lid with parafilm or similar material. Place in an individually sealed bag.
- MDL does not perform identification testing of possible agents of bioterrorism and/or identification confirmation of Salmonella or Shigella species. Please reference your local state health department on how to proceed with these isolates.

- Invitro susceptibility does not guarantee a clinical response. Therefore, the decision to treat with a particular agent should not be based solely on the antimicrobial susceptibility testing result.

WSU Molecular Diagnostics Laboratory
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Created: 9/13/2024
Updated: 9/13/2024

Bacterial Identification and Susceptibility – Anaerobic Information Sheet

Overview

MDL Test Name

Bacterial Identification and Susceptibility – Anaerobic

MDL Test Code

BAC_IDSUSN

Ask at Order Questions

Source

Specimen Source

Pure culture isolate on suitable agar (solid) medium; slant or plate in an anaerobic environment.

Specimen Requirements

Container/Tube

Suitable agar (solid) medium for isolate submitted. Submit a sealed plate in an anaerobic transport bag to maintain viability.

Specimen Volume (minimum)

Pure culture with viable growth must be submitted.

Sample Stability Time

Stability varies with organism and transport system; usually up to 48 hours at ambient temperatures but fastidious organisms should be sent promptly.

Transport/Storage Conditions

Ambient (20 – 25°C)

Patient Preparation / Collection Instructions

N/A

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

3 – 5 days

Specimen Retention Time

7 days

Method Description

- Identification methods may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels. Genus and species are reported on anaerobic bacterial isolates whenever possible.
- Susceptibility testing will be minimal inhibitory concentration (MIC) (gradient strip diffusion).
- NOTE: Susceptibility testing is performed depending on source and identification. If the source and identification do not warrant susceptibility testing per CLSI guidelines, MDL will notify the client prior to continuing with testing.

Reference Values

- Identification of organism.
- Susceptibility results are reported as minimal inhibitory concentration (MIC) in µg/mL. Breakpoints are used to categorize an organism as susceptible, susceptible-dose dependent, intermediate, resistant, or nonsusceptible according to either U.S. Food and Drug Administration (FDA) and/or Clinical Laboratory Standards Institute (CLSI).

Cautions

- Testing cannot be performed on mixed cultures, the submitted isolate must be pure.
- Testing ability depends on the viability of the organism submitted.
- Verify labeled appropriately and securely sealed for transport to avoid breaking or leakage. Recommend securing the lid with parafilm or similar material. Place in an individually sealed bag and then in an anaerobic transport bag.
- Invitro susceptibility does not guarantee a clinical response. Therefore, the decision to treat with a particular agent should not be based solely on the antimicrobial susceptibility testing result.

WSU Molecular Diagnostics Laboratory
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(316) 978-8600

Created: 7/26/2024
Updated: 8/14/2024

Blood Culture Information Sheet

Overview

MDL Test Name

Blood Culture

MDL Test Code

BLD_CULT

Ask at Order Questions

N/A

Specimen Source

Blood (specify collection site)

Specimen Requirements

Container/Tube

- Adults: Recommend one FA Plus and one FN Plus bottle per order*
- Pediatric: Recommend one PF Plus bottle per order

Recommended Total Volume and Numbers of Blood Cultures**				
Weight in kg (lb)	**# of Orders/# of sites**	**Culture Order set 1: Site 1 Volume/Bottle**	**Culture Order set 2: Site 2 Volume/Bottle**	**Total Blood Volume Drawn**
≤ 1 (2.2lbs)	1 order / 1 site	0.5-2mL / one PF Plus	-	0.5-2mL
1.1-2 (2.4-5lbs)	2 orders / 2 sites	0.5-2mL / PF Plus	0.5-2mL / PF Plus	1-4mL
2.1-12.7 (5-28lbs)	2 orders / 2 sites	4mL / one PF Plus	2 mL / one PF Plus	6mL
12.8-36.3 (28-80lbs)	2 orders / 2 sites	5mL / one FA Plus	5mL / one FA Plus	10mL
>36.3 (80lbs) [Treat as Adult]	2 orders / 2 sites	20mL / 10mL in each FA Plus & FN Plus	20mL / 10mL in each FA Plus & FN Plus	40mL

*If unable to collect the full volume required for both FA Plus and FN Plus bottles, we will accept only an FA Plus bottle or only a PF Plus bottle if necessary.

Specimen Volume (minimum)

- FA Plus and FN Plus Bottles: minimum 4mL; maximum 10 mL
- PF Plus Bottles: minimum 0.5 mL; maximum 4mL

Sample Stability Time

- 24 hours
- **Please notify MDL if a STAT courier is needed to meet this time.**

Transport/Storage Conditions

- Ambient (20 – 25°C); maintain at room temperature
- **DO NOT REFRIGERATE**

Patient Preparation / Collection Instructions

Refer to Blood Culture Collection Instructions

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

5 – 7 days

Specimen Retention Time

7 days

Method Description

Culture using automated continuous monitoring system

Reference Values

No growth

Cautions

- Do not use expired bottles
- The media used may not support the growth of some organisms. There are a number of fastidious microorganisms that infect the blood that cannot be grown in routine cultures of blood. If looking for a specific organism, please reach out to MDL prior to ordering to determine if we can support your request.

- A negative culture result does not necessarily rule out bacteremia; false-negative results occur when pathogens fail to grow.
- False-positive results can occur when contaminants from the collection process grow. Consideration of the full clinical picture and results of multiple blood culture sets should be used when determining if bacteremia is present.
- This order request is for blood cultures incubated within MDL's continuous monitoring system. If you are a clinical site that incubates their own bottles and is sending only a previously incubated, positive bottle then please reference order: Blood Culture (POSITIVE) - Identification and Susceptibility (POSBLD_CULT).

References**

1. Clinical Microbiology Procedures Handbook. 4th Ed. ASM. ASM Press. Washington DC, 2016.

WSU Molecular Diagnostics Laboratory
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Created: 9/16/2024
Updated: 9/16/2024

Blood Culture (Positive – Referred) Identification Information Sheet

Overview

MDL Test Name

Blood Culture (Positive – Referred) – Identification

MDL Test Code

POSBLD_CULT_ID

Ask at Order Questions

Gram stain result

Specimen Source

Positive blood culture bottle

Specimen Requirements

Container/Tube

- Blood culture bottle(s) that have been flagged positive by the client's instrumentation

AND/OR

- Culture on suitable agar (solid) medium plate
- NOTE: For clients that are able, plates should be subbed and submitted with the bottle(s) to expedite results

Specimen Volume (minimum)

N/A

Sample Stability Time

Stability varies with the organism; STAT delivery is recommended

Transport/Storage Conditions

Ambient (20 – 25°C)

Patient Preparation / Collection Instructions

Must be a blood culture bottle(s) that have been flagged positive by the client's instrumentation, please include the initial gram stain result from the client site.

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

1 – 4 days

Specimen Retention Time

7 days

Method Description

Identification methods may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels. Genus and species are reported on anaerobic bacterial isolates whenever possible.

Reference Values

No growth

Cautions

- The stability time of isolate in a positive bottle is organism-dependent. The best practice is to subculture positive bottles as soon as possible and/or transport bottle(s) to MDL as soon as possible.
- Certain isolates when only isolated from one culture set can be indicative of contaminants.

WSU Molecular Diagnostics Laboratory
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(316) 978-8600

Created: 9/13/2024
Updated: 9/13/2024

Blood Culture (Positive – Referred) Identification and Susceptibility Information Sheet

Overview

MDL Test Name

Blood Culture (Positive – Referred) – Identification and Susceptibility

MDL Test Code

POSBLD_CULT

Ask at Order Questions

Gram stain result

Specimen Source

Positive blood culture bottle

Specimen Requirements

Container/Tube

- Blood culture bottle(s) that have been flagged positive by the client's instrumentation.

AND/OR

- Culture on a suitable agar (solid) medium plate
- NOTE: For clients that are able, plates should be subbed and submitted with the bottle(s) to expedite results.

Specimen Volume (minimum)

N/A

Sample Stability Time

Stability varies with the organism; STAT delivery is recommended

Transport/Storage Conditions

Ambient (20 – 25°C)

Patient Preparation / Collection Instructions

Must be a blood culture bottle(s) that have been flagged positive by the client's instrumentation, please include the initial gram stain result from the client site.

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

1 – 4 days

Specimen Retention Time

7 days

Method Description

- Identification methods may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels. Genus and species are reported on anaerobic bacterial isolates whenever possible.
- Susceptibility testing may include minimal inhibitory concentration (MIC) (broth microdilution or gradient strip diffusion) or disc diffusion.

Reference Values

No growth

Cautions

- The stability time of isolate in a positive bottle is organism-dependent. The best practice is to subculture positive bottles as soon as possible and/or transport bottle(s) to MDL as soon as possible.
- Certain isolates when only isolated from one culture set can be indicative of contaminants.

WSU Molecular Diagnostics Laboratory
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Created: 7/26/2024
Updated: 2/24/2025

Body Fluid Culture Information Sheet

Overview

MDL Test Name

Body Fluid Culture – Aerobic, Anaerobic, Gram Stain

MDL Test Code

BFL_CULT

Ask at Order Questions

N/A

Specimen Source

- Synovial
- Peritoneal
- Pericardial
- Pleural
- Other (indicate specific source)

Specimen Requirements

Container/Tube

Sterile Container

Specimen Volume (minimum)

0.5mL

Sample Stability Time

48 hours

Transport/Storage Conditions

Ambient (20 – 25°C); maintain at room temperature

Patient Preparation / Collection Instructions

- Varies depending on the fluid type. Collected by a healthcare provider using sterile technique. Contamination with normal flora from skin (or other body surfaces) should be avoided.
- **Do NOT** submit syringe with needle attached! If submitting a syringe, remove the needle, expel air and cap syringe.
- This order is reserved for 'normally sterile body fluids', those fluids aspirated from an abscess and/or collected from a drainage system should be ordered as ‘Wound Culture – Aerobic, Anaerobic, Gram Stain’ (WNDAA_CULT).

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

4 – 6 days

Specimen Retention Time

7 days

Method Description

- Conventional aerobic and anaerobic bacterial culture techniques with selective and non-selective media.
- Identification methods (when appropriate) may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels.
- Susceptibility testing (when appropriate) may include minimal inhibitory concentration (MIC) (broth microdilution or gradient strip diffusion) or disk diffusion.

Reference Values

No growth of pathogens

Cautions

- False-negative cultures can be caused by low numbers of organisms, prior antimicrobial treatment, or the fastidious nature of the infective organism.
- False-positive cultures can result from contamination of the specimen with skin microbiota.
- This order is generally reserved for those body fluids normally considered ‘sterile’, outside of cerebral spinal fluid and urine, which have their own orders.

WSU Molecular Diagnostics Laboratory
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Created: 7/26/2024
Updated: 2/24/2025

Cerebral Spinal Fluid Culture and Gram Stain Information Sheet

Overview

MDL Test Name

Cerebral Spinal Fluid Culture and Gram Stain

MDL Test Code

CSF_CULT

Ask at Order Questions

- CSF Volume?
- CSF Color?
- CSF Clarity?

Specimen Source

Cerebral Spinal Fluid (specify source/collection method: i.e.: Lumbar puncture, shunt, ventricular shunt, etc.)

Specimen Requirements

Container/Tube

Sterile Container

Specimen Volume (minimum)

0.5mL

Sample Stability Time

48 hours

Transport/Storage Conditions

Ambient (20 – 25°C); maintain at room temperature

Patient Preparation / Collection Instructions

Collected by health care provider using sterile technique. Contamination with normal flora from skin (or other body surfaces) should be avoided.

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

4 – 6 days

Specimen Retention Time

7 days

Method Description

- Conventional aerobic bacterial culture technique with selective and non-selective media.
- Identification methods (when appropriate) may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels.
- Susceptibility testing (when appropriate) may include minimal inhibitory concentration (MIC) (broth microdilution or gradient strip diffusion) or disk diffusion.

Reference Values

No growth

Cautions

- This order **does NOT include an anaerobic culture**. If an anaerobic culture is desired, please use order: CSF_CULT_ANAGS (Cerebral Spinal Fluid Culture Aerobic, Anaerobic, and Gram Stain).
- False-negative cultures can be caused by low numbers of organisms, prior antimicrobial treatment, or the fastidious nature of the infective organism.
- False-positive cultures can result from contamination of the specimen with skin microbiota.

WSU Molecular Diagnostics Laboratory
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Created: 7/26/2024
Updated: 2/24/2025

Cerebral Spinal Fluid Culture (Aerobic, Anaerobic, and Gram Stain) Information Sheet

Overview

MDL Test Name

Cerebral Spinal Fluid Culture – Aerobic, Anaerobic, and Gram Stain

MDL Test Code

CSF_CULT_ANAGS

Ask at Order Questions

- CSF Volume?
- CSF Color?
- CSF Clarity?

Specimen Source

Cerebral Spinal Fluid (specify source/collection method: i.e.: Lumbar puncture, shunt, ventricular shunt, etc.)

Specimen Requirements

Container/Tube

Sterile Container

Specimen Volume (minimum)

0.5mL

Sample Stability Time

48 hours

Transport/Storage Conditions

Ambient (20 – 25°C); maintain at room temperature

Patient Preparation / Collection Instructions

Collected by health care provider using sterile technique. Contamination with normal flora from skin (or other body surfaces) should be avoided.

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

4 – 6 days

Specimen Retention Time

7 days

Method Description

- Conventional aerobic and anaerobic bacterial culture technique with non-selective media.
- Identification methods (when appropriate) may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels.
- Susceptibility testing (when appropriate) may include minimal inhibitory concentration (MIC) (broth microdilution or gradient strip diffusion) or disk diffusion.

Reference Values

No growth

Cautions

- This order includes anaerobic culture, recommended for patients with predisposing factors to anaerobic meningitis, such as head trauma, prior neurosurgical procedures, or implantable medical devices such as ventriculoperitoneal shunts or ventricular drains.
- False-negative cultures can be caused by low numbers of organisms, prior antimicrobial treatment, or the fastidious nature of the infective organism.
- False-positive cultures can result from contamination of the specimen with skin microbiota.

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Created: 7/29/2024
Updated: 8/14/2024

Genital Culture Information Sheet

Overview

MDL Test Name

Genital Culture and Gram Stain

MDL Test Code

GTL_CULT

Ask at Order Questions

N/A

Specimen Source

- Genital
- Vaginal
- Abscess
- Endocervical
- Rectovaginal
- Urethral/Penial
- Other

Specimen Requirements

Container/Tube

- ESwab
- ESwab Minitip Flocked Collection Kit (Urogenital)

Specimen Volume (minimum)

- N/A (swab specimen)
- Must have swab present in container

Sample Stability Time

- 24 hours
- **Please notify MDL if a STAT courier is needed to meet this time.**

Transport/Storage Conditions

- Ambient (20 – 25°C)
- **DO NOT REFRIGERATE**

Patient Preparation / Collection Instructions

- **Female**: **Do NOT** use lubricant. Cervical mucus should be removed first and discarded before inserting the swab into the endocervical canal, move the swab from side to side allowing several seconds for absorption of organisms by the swab. Return the swab to the transport tube and label.
  For vaginal, wipe away excessive secretions or discharge. Obtain secretions from the mucosal membrane of the vaginal vault with the swab. Return the swab to the transport tube and label.
- **Male**: Using a swab, insert 2 – 4 cm into the urethral lumen, rotate the swab & leave it in place for 2 seconds. Alternatively, use a swab to collect a specimen of urethral discharge. Return the swab to the transport tube and label.
- Refer to the WSU MDL ESwab Collection Guide

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

3 – 4 days

Specimen Retention Time

7 days

Method Description

- Conventional aerobic bacterial culture technique with selective and non-selective media.
- Identification methods (when appropriate) may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels.
- Susceptibility testing (when appropriate) may include minimal inhibitory concentration (MIC) (broth microdilution or gradient strip diffusion) or disk diffusion.

Reference Values

- No growth of pathogen
- Normal skin and/or vaginal flora isolated
- Normal skin and/or vaginal flora includes:
    - Lactobacilli
    - Corynebacterium spp
    - *Gardnerella vaginalis*
    - coagulase-negative staphylococci
    - *Staphylococcus aureus*
    - *Streptococcus agalactiae* (GBS)
    - Enterococcus spp
    - *Escherichia coli*
    - Anaerobes
    - Micrococci
    - viridans group streptococci

Cautions

- Many agents of disease are difficult to culture. A lack of isolation does not necessarily indicate that a pathogen is not the cause of infection.
- A routine genital culture will not detect carriage of Group B Streptococcus in all cases.
- Herpes simplex virus, Chlamydia, *Ureaplasma urealyticum*, and *Trichomonas vaginalis* are not recovered by this test.

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(316) 978-8600

Created: 7/29/2024
Updated: 8/14/2024

Group A Screen by Culture Information Sheet

Overview

MDL Test Name

Group A Screen by Culture

MDL Test Code

GAS

Ask at Order Questions

Does the patient have a penicillin allergy?

Specimen Source

Throat

Specimen Requirements

Container/Tube

ESwab

Specimen Volume (minimum)

- N/A (swab specimen)
- Must have swab present in container

Sample Stability Time

48 hours

Transport/Storage Conditions

- Refrigerated (2 – 8°C)
- Ambient (20 – 25°C)

Patient Preparation / Collection Instructions

Refer to WSU MDL ESwab Collection Guide

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

1 – 3 days

Specimen Retention Time

7 days

Method Description

- Conventional aerobic bacterial culture technique, screening for presence or absence only of Group A (*Streptococcus pyogenes*).
- Identification methods (when appropriate) may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels.

Reference Values

No growth of Group A Strep (*Streptococcus pyogenes*)

Cautions

- A 'positive' pharyngeal culture for GAS indicates the presence of *S. pyogenes* but does not distinguish between infection and colonization.
- Reports only presence or absence of Group A Streptococcus.

WSU Molecular Diagnostics Laboratory
mdlsupport@wichita.edu
(316) 978-8600

Created: 7/29/2024
Updated: 8/15/2024

Group B Screen by Culture Information Sheet

Overview

MDL Test Name

Group B Screen by Culture

MDL Test Code

GBS

Ask at Order Questions

- Does the patient have a penicillin allergy?
- Is the patient >34 weeks gestation?

Specimen Source

Rectovaginal

Specimen Requirements

Container/Tube

ESwab

Specimen Volume (minimum)

- N/A (swab specimen)
- Must have swab present in container

Sample Stability Time

48 hours

Transport/Storage Conditions

- Refrigerated (2 – 8°C)
- Ambient (20 – 25°C)

Patient Preparation / Collection Instructions

- Remove swab from the packaging, careful not to contaminate it. Collect both a vaginal **AND** rectal specimen, using a single swab. Swab the lower vagina (vaginal introitus), followed by the rectum (swab should be inserted through the anal sphincter) preferably using the same swab. Move the swab from side to side, or rotate the swab at the collection site, allowing several seconds for absorption of organisms by the swab. Place the swab into transport tube and label it appropriately.
- **NOTE**: Cervical, perianal, perirectal, or perineal specimens have been shown to be less sensitive than co-collection of vaginal and rectal specimens and are NOT acceptable.
- Refer to the WSU MDL ESwab Collection Guide

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

3 – 4 Days

Specimen Retention Time

7 days

Method Description

- Conventional aerobic bacterial culture technique with selective and non-selective media.
- Identification methods (when appropriate) may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, commercial identification panels.

Reference Values

No growth of Group B Strep (*Streptococcus agalactiae*)

Cautions

- This test is for perinatal screening to detect GBS colonization. For diagnosis of GBS disease in nonpregnant adults and in neonates, routine culture of the symptomatic body site should be ordered.
- Detects only the presence or absence of Group B Streptococcus.
- **NOTE**: Susceptibility testing is not routinely performed for Group B Screen by culture. Susceptibility testing is only performed when 'Ask at order question', Penicillin allergy? Is answered 'yes' or if an 'add-on' request/order is submitted within 7 days of the 'final date' of the report.

WSU Molecular Diagnostics Laboratory
mdlsupport@wichita.edu
(316) 978-8600

Created: 7/29/2024
Updated: 2/24/2025

Lower Respiratory Culture with Gram Stain Information Sheet

Overview

MDL Test Name

Lower Respiratory Culture with Gram Stain

MDL Test Code

LR_CULT

Ask at Order Questions

N/A

Specimen Source

Lower Respiratory Sources:

- Sputum
- Tracheal Aspirate
- Bronchial Wash
- Bronchial Alveolar Lavage (BAL)
- Biopsy

  NOTE: indicate site with bronchial specimens i.e.: RUL, etc.

Specimen Requirements

Container/Tube

- Sterile Container – Washing/Lavage/Sputum/Aspirate
- Sterile Saline Tube – Brushing/Biopsy

Specimen Volume (minimum)

0.5 mL or ~ 5 mm diameter (if solid/semisolid)

Sample Stability Time

48 hours

Transport/Storage Conditions

Refrigerated (2 – 8°C)

Patient Preparation / Collection Instructions

- Bronchial (BAL, washings, brushings): Collect via bronchoscopy and place in sterile container. Cover brushes with 1.0mL of sterile saline.
- Sputum: Early morning specimens preferred. Instruct patient to produce lung material, not saliva. Collect in sterile container. Specimens can be collected by respiratory therapy (induced).
- Tracheal Aspirate: Collect through mouth or nose using sterile tubing. Collect in sterile container.

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

3 – 5 days

Specimen Retention Time

7 days

Method Description

- Conventional aerobic bacterial culture technique with selective and non-selective media.
- Identification methods (when appropriate) may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels.
- Susceptibility testing (when appropriate) may include minimal inhibitory concentration (MIC) (broth microdilution or gradient strip diffusion) or disk diffusion.

Reference Values

- No pathogens isolated.
- Normal Respiratory Flora isolated.

- Normal respiratory flora includes:
  - Viridans Streptococci
  - Non-pathogenic Neisseria
  - Diphtheroids
  - Coagulase-negative Staphylococcus
  - Rothia
  - Group F Streptococcus
  - Anaerobes
  - Haemophilus species (not influenzae)
  - Eikenella
  - Actinobacillus
  - Capnocytophaga
  - Moraxella
  - Enterococci
  - Yeasts (not cryptococcus)
  - Insignificant numbers of *S. aureus*, gram-negative rods, and *N. meningitidis*

Cautions

- Lower respiratory samples are not routinely tested for anaerobic isolates.
- Poor quality of sputum specimens is documented in gram stain by the presence of >10 squamous epithelial cells per low power field.
- A negative bacterial culture does not rule out lower respiratory infection. The primary pathogen is frequently not recovered from patients with pneumoniae due to antimicrobial therapy or because the infection is caused by another type of organism (i.e.: virus, parasite, fungus, mycoplasma, or mycobacterium) that will not be recovered by routine bacterial culture.

WSU Molecular Diagnostics Laboratory
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Created: 6/7/2024
Updated: 2/24/2025

MRSA Screen by Culture Information Sheet

OVERVIEW

MDL Test Name

MRSA Screen by Culture

MDL Test Code

MRSAS

Ask at Order Questions

N/A

Specimen Source

Anterior Nares

SPECIMEN REQUIREMENTS

Container/Tube

ESwab

Specimen Volume (minimum)

- N/A (swab specimen)
- Must have swab present in container

Sample Stability Time

48 hours

Transport/Storage Conditions

- Refrigerated (2 – 8°C)
- Ambient (20 – 25°C)

Patient Preparation/Collection Instructions

Refer to the Nares ESwab Collection Guide

PERFORMANCE

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

1 – 2 days

Specimen Retention Time

7 days

Method Description

A nasal swab is inoculated onto Spectra MRSA agar, a selective and differential chromogenic medium used in qualitative detection of nasal colonization of methicillin-resistant *Staphylococcus aureus* (MRSA).

Reference Values

No growth of Methicillin-Resistant *Staphylococcus aureus* (MRSA).

Cautions

This test is intended only for screening for MRSA colonization and is not intended to diagnose MRSA infection.

WSU Molecular Diagnostic Laboratory
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Created: 7/29/2024
Updated: 9/10/2024

Neisseria gonorrhoeae Culture Information Sheet

Overview

MDL Test Name

Neisseria gonorrhoeae Culture

MDL Test Code

NG_CULT

Ask at Order Questions

N/A

Specimen Source

- Vaginal
- Endocervical
- Urethral/Penial
- Urethral Discharge
- Vaginal Discharge
- Genital
- Lesion
- Throat

Specimen Requirements

Container/Tube

- ESwab
- ESwab Minitip Flocked Collection Kit (Urogenital)

Specimen Volume (minimum)

- N/A (swab specimen)
- Must have swab present in container

Sample Stability Time

- 24 hours
- **Please notify MDL if a STAT courier is needed to meet this time.**

Transport/Storage Conditions

- Ambient (20-25°C)
- **DO NOT REFRIGERATE**

Patient Preparation / Collection Instructions

- Do not collect urethral specimens until at least one hour after urinating. Collection directly from male urethral discharge is desirable.
- Endocervix: Swab endocervical canal. Avoid contaminating swab with vaginal secretions. Cultures from the urethra or vagina are indicated from females when endocervical culture is not possible.
- Urethra: Strip the urethra toward the orifice to express exudate. Use a sterile swab to obtain specimen.
- Vagina: use a speculum, moistened only with warm water, not lubricant. Obtain a specimen from the posterior vaginal vault or from the vaginal orifice.
- Refer to WSU MDL ESwab General Collection Guide

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

3 – 4 days

Specimen Retention Time

7 days

Method Description

- Conventional aerobic bacterial culture technique with selective media.
- Identification methods (when appropriate) may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels.

Reference Values

No growth of *Neisseria gonorrhoeae*

Cautions

- Culture is evaluated for presence/absence of *N. gonorrhoeae* only.
- Overgrowth of certain 'normal vaginal flora' may make it impossible to rule out presence of *N. gonorrhoeae*.
- Because of the labile nature of *N. gonorrhoeae*, a negative culture does not rule out infection.

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Created: 6/7/2024
Updated: 9/16/2024

RIC Information Sheet

Overview

MDL Test Name

RIC (RSV A/B, Influenza A/B, SARS-CoV-2 panel by RT-PCR)

MDL Test Code

pRIC

Ask at Order Questions

None

Specimen Source

- Nasopharyngeal

OR

- Oropharyngeal

Specimen Requirements

Container/Tube

- Viral Transport Media (M4 or M5) with flocked Nasopharyngeal swab

OR

- Oropharyngeal swab

Specimen Volume (minimum)

N/A (swab specimen)

Sample Stability Time

- 72 hours at 20 – 22°C
- 7 days at 2 – 8°C

Transport/Storage Conditions

Refrigerated (4 – 8°C) or Ambient (20 – 22°C)

Patient Preparation / Collection Instructions

- Refer to the Nasopharyngeal Swab Collection
- Refer to the Oropharyngeal Swab Collection

Performance

Days Performed

Daily; Monday – Friday at 11:30 AM

Report Available (TAT) – (Once received at MDL)

< 48 hours

Specimen Retention Time

7 days

Method Description

Real-time reverse transcription polymerase chain reaction (RT-PCR) test intended for qualitative detection of nucleic acid from Respiratory Syncytial Virus (RSV) A/B, Influenza Virus A/B, SARS-CoV-2 Virus.

Reference Values

Not Detected (RSV A/B, Influenza A/B, SARS-CoV-2)

Interpretation

- A detected (positive) result indicates that the virus RNA indicated is present in the patient specimen, suggesting infection with the indicated virus. The test does not indicate the stage of infection. Rarely, more than one virus may be detected from the same patient specimen. Test results should always be correlated with the patient's history and clinical presentation.
- An undetected (negative) result indicates that RSV A, RSV B, Influenza A, Influenza B, SARS-CoV-2 RNA is not present in patient's sample. This can be influenced by stage of infection, and/or quality of specimen collected for testing. Test results should always be correlated with the patient's history and clinical presentation.
- An inconclusive result indicates the presence or absence of RSV A, RSV B, Influenza A, influenza B, or SARS-CoV-2 RNA in the specimen could not be determined with certainty, possibly due to real-time, reverse transcription polymerase chain inhibition. Submission of a new specimen for testing is recommended if clinically indicated.

Cautions

- This test has not been FDA-cleared or approved. It is a lab-developed test, validated by MDL.
- Undetected (negative) results do not preclude infection and should not be used as the sole basis for treatment. Results should be correlated with the patient's history and clinical presentation.
- This test is specific for RSV A/B, Influenza A/B, and SARS-CoV-2. Positive results do not exclude the possibility of concurrent infection with other respiratory viruses.
- This test detects Influenza A/B viral RNA but does not distinguish among the different viral subtypes.
- This test detects RSV A/B viral RNA but does not distinguish among the different viral subtypes.

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Created: 6/6/2024
Updated: 9/16/2024

SalivaDirect Information Sheet

Overview

MDL Test Name

Saliva Direct (SARS-Cov-2 by RT-PCR (Saliva Only))

MDL Test Code

pCOVSAL

Ask at Order Questions

Several

Specimen Source

Saliva

Specimen Requirements

Container/Tube

5mL Screw Cap Eppendorf Tube

Specimen Volume (minimum)

0.5 mL

Sample Stability Time

- 72 hours at 20 – 22°C
- 7 days at 2 – 8°C

Transport/Storage Conditions

Refrigerated (4 – 8°C) or Ambient (20 – 22°C)

Patient Preparation / Collection Instructions

- The patient must not eat, drink, or use tobacco products within 30 minutes of collection.
- Refer to the Viral Saliva Specimen Collection Instructions.

Performance

Days Performed

Daily; Monday – Friday at 11:30 AM

Report Available (TAT) – (once received at MDL)

< 48 hours

Specimen Retention Time

7 days

Method Description

Real-time reverse transcription polymerase chain reaction (RT-PCR) test intended for qualitative detection of nucleic acid from SARS-CoV-2.

Reference Values

Not Detected

Interpretation

- A positive (detected) result indicates SARS-CoV-2 RNA is present, suggesting infection of COVID-19
- A negative (undetected) result indicates that SARS-CoV-2 is not present in the patient's sample, this can be influenced by the stage of infection, and/or quality of specimen collected for testing. Results should be correlated with the patient's history and clinical presentation.
- An inconclusive result indicates the presence or absence of SARS-CoV-2 RNA in the specimen could not be determined with certainty, possibly due to real-time, reverse transcription polymerase chain inhibition. Submission of a new specimen for testing is recommended if clinically indicated.

Cautions

- Undetected results do not rule out COVID-19 in patients and should not be used as the sole basis for treatment. Results should be correlated with the patient's history and clinical presentation.
- This test is specific for SARS-CoV-2. Positive results do not exclude the possibility of concurrent infection with other respiratory viruses.
- The sensitivity of the assay is dependent on the timing of specimen collection in relation to symptom onset, and the quality of specimen submitted for testing.
- FDA cleared for use under Emergency Use Authorization (EUA) only.

WSU Molecular Diagnostics Laboratory
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Created: 7/30/2024
Updated: 3/3/2025

Stool Culture with Shiga Toxin Test Information Sheet

Overview

MDL Test Name

Stool Culture with Shiga Toxin Test

MDL Test Code

ST_CULT

Ask at Order Questions

N/A

Specimen Source

Stool or Rectal Swab

Specimen Requirements

Container/Tube

FecalSwab

Specimen Volume (minimum)

- N/A (swab specimen)
- Must have swab present in container

Sample Stability Time

- 72 hours if refrigerated (Preferred)
- 48 hours if ambient

Transport/Storage Conditions

- Refrigerated (2 – 8°C) (Preferred)
- Ambient (20 – 25°C)

Patient Preparation / Collection Instructions

- The patient should be cautioned against the use of antacids, barium, bismuth, anti-diarrheal medication, antibiotics, histamine, nonsteroidal anti-inflammatory drug, or oily laxatives prior to collection of the specimen.
- Refer to WSU MDL FecalSwab Collection Guide

Performance

Days Performed

Daily; Sunday – Monday

Report Available (TAT) – (Once received at MDL)

3 – 5 days

Specimen Retention Time

7 days

Method Description

- **Culture**
  - Conventional aerobic bacterial culture technique with selective and non-selective media.
  - Identification methods (when appropriate) may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels.
  - Susceptibility testing (when appropriate) may include minimal inhibitory concentration (MIC) (broth microdilution or gradient strip diffusion) or disk diffusion.
- **Shiga Toxin**: Rapid Membrane Enzyme Immunoassay

Reference Values

- Culture: No growth of Salmonella, Shigella, or Campylobacter
- Shiga Toxin: No Shiga toxins detected

Cautions

- **Note**: MDL performs a Shiga Toxin Test with each stool culture order.
- A negative shiga toxin result does not preclude the possibility of the presence of shiga toxins in the specimen which may occur if the level of antigen is below the detection limit of the test. (cutoff for Shiga Toxin QuiK Chek established at concentrations of 0.04 ng/mL Stx1 and 0.04 ng/mL Stx2).
- Toxin produced by Shigella dysenteriae is nearly identical to the Stx1 produced by E. coli, and if present at detectable levels, will give a positive result of Stx1.
- This culture screens for Salmonella, Shigella, and Campylobacter. Vibrio and Yersinia require specific media and incubation conditions for growth, if found they will be reported, but these are not routinely covered by this order.
- Fresh stool samples will not be accepted.
- Diapers will not be accepted.

WSU Molecular Diagnostics Laboratory
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Created: 8/27/2024
Updated: 2/24/2025

Tissue Culture Information Sheet

Overview

MDL Test Name

Tissue Culture – Aerobic, Anaerobic, Gram Stain

MDL Test Code

TSS_CULT

Ask at Order Questions

N/A

Specimen Source

Tissue (specify site)

Specimen Requirements

Container/Tube

- Sterile Container
- NOTE: If the collector is concerned about the tissue sample drying out, sterile saline can be added to a sterile gauze to keep the container moist.

Specimen Volume (minimum)

~3 – 4 mm

Sample Stability Time

48 hours

Transport/Storage Conditions

Ambient (20 – 25°C); maintain at room temperature

Patient Preparation / Collection Instructions

- Cleanse skin or mucosal surfaces. For closed wounds and aspirates, disinfect as for a blood culture collection with 2% chlorhexidine or 70% alcohol followed by an iodine solution. Remove iodine with alcohol prior to specimen collection. For open wounds, debride (if appropriate), and thoroughly rinse with sterile saline prior to collection. Sample viable infected tissue, rather than superficial debris.
- Tissue biopsies should be collected from areas within and adjacent to the area of infection. (large enough tissue samples should be collected to perform all of the tests requested)

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

4 – 6 days

Specimen Retention Time

7 days

Method Description

- Conventional aerobic and anaerobic bacterial culture technique with selective and non-selective media.
- Identification methods (when appropriate) may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels.
- Susceptibility testing (when appropriate) may include minimal inhibitory concentration (MIC) (broth microdilution or gradient strip diffusion) or disk diffusion.

Reference Values

No growth.

Cautions

- Antibiotics administered prior to sample collection may negatively affect the recovery of organisms associated with infection. Preferably collect specimen prior to initiation of therapy and only from wounds that are clinically infected or deteriorating or that fail to heal over a long period.
- Many wound infections are polymicrobic and the isolation of an organism in culture may or may not correlate with infection of the wound.

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Upper Respiratory Culture Information Sheet

Overview

MDL Test Name

Upper Respiratory Culture

MDL Test Code

UR_CULT

Ask at Order Questions

N/A

Specimen Source

- Throat swab
- Oropharyngeal swab
- Nasal swab
- Nasopharynx swab

Specimen Requirements

Container/Tube

ESwab

Specimen Volume (minimum)

- N/A (swab specimen)
- must have swab present in container

Sample Stability Time

48 hours

Transport/Storage Conditions

- Refrigerated (2 – 8°C)
- Ambient (20 – 25°C)

Patient Preparation / Collection Instructions

Refer to the following MDL guides on MDL's website:

- Nares Swab Collection
- Oropharyngeal (Throat) Swab Collection
- Nasopharyngeal Swab Collection
- WSU MDL ESwab General Collection Guide

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

3 – 4 days

Specimen Retention Time

7 days

Method Description

- Conventional aerobic bacterial culture technique with selective and non-selective media.
- Identification methods (when appropriate) may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels.
- Susceptibility testing (when appropriate) may include minimal inhibitory concentration (MIC) (broth microdilution or gradient strip diffusion) or disk diffusion.

Reference Values

- No pathogens isolated.
- Normal Respiratory Flora isolated.
    - Normal respiratory flora includes:
        - Viridans Streptococci
        - nonpathogenic Neisseria
        - diphtheroids
        - coagulase-negative Staphylococcus
        - Rothia

- Group F Streptococcus
- Anaerobes
- Haemophilus species (not influenzae)
- Eikenella
- Actinobacillus
- Capnocytophaga
- Morexella
- Enterococci
- Yeasts (not Cryptococcus)
- Insignificant numbers of *S. aureus*, gram-negative rods, and *N. meningitidis*

Cautions

- Specimens from the upper respiratory tract can be easily obtained but are always contaminated with resident microbiota. Many microorganisms present in the nares and throat are found in both the disease and the carrier states.
- Culture of nasopharyngeal specimens to detect carriage of potential pathogens such as *Neisseria meningitidis*, *S. pneumoniae*, and *H. influenzae* should be discouraged. Since these pathogens are all part of the normal oropharyngeal flora, the clinical relevance of culturing them from this site cannot be determined.
- Upper respiratory cultures should be done when detection of a specific pathogen is sought and not be performed routinely to detect any organism that is present.

WSU Molecular Diagnostics Laboratory
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Created: 6/25/2024
Updated: 2/24/2025

Urine Culture Information Sheet

OVERVIEW

MDL Test Name

Urine Culture

MDL Test Code

URN_CULT

Ask at Order Questions

N/A

Specimen Source

Urine, Specify collection method (i.e.: clean catch, foley catheter, cystoscopy, etc.)

SPECIMEN REQUIREMENTS

Container/Tube

- BD Vacutainer Urine C&S Tube (Preserved) **[Preferred]**
- Sterile Container (Unpreserved)

Specimen Volume (minimum)

- BD Vacutainer Urine C&S Tube: must be filled to minimum line printed on the tube (4mL)
- Unpreserved: 0.5mL

Sample Stability Time

- BD Vacutainer (Preserved): 48 hours
- Sterile Container (Unpreserved, Refrigerated): 24 hours
- **Please notify MDL if a STAT courier is needed to meet this time.**

Transport/Storage Conditions

- BD Vacutainer: Ambient (20 – 25°C) or Refrigerated (2 – 8°C)
- Sterile Container: Refrigerated (2 – 8°C)

Patient Preparation / Collection Instructions

Refer to the Urine Culture Specimen Collection Guide

PERFORMANCE

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

2 – 4 days

Specimen Retention Time

7 days

Method Description

- Conventional aerobic bacterial culture technique with selective and non-selective media.
- Identification methods (when appropriate) may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels.
- Susceptibility testing (when appropriate) may include minimal inhibitory concentration (MIC) (broth microdilution or gradient strip diffusion) or disk diffusion.

Reference Values

No growth

Cautions

Unrefrigerated, unpreserved urine specimens greater than two hours old may be subject to overgrowth with organisms normally present in the urethral and periurethral areas, which may yield inaccurate or misleading results.

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Created: 7/30/2024
Updated: 2/24/2025

Wound Culture (Aerobic, Gram Stain) Information Sheet

Overview

MDL Test Name

Wound Culture – Aerobic, Gram Stain

MDL Test Code

WNDA_CULT

Ask at Order Questions

Was the wound specimen collected during surgery?

Specimen Source

Wound (specify source/site)

Specimen Requirements

Container/Tube

- ESwab - all swab collections
- Sterile Container - all aspirations/drainage

Specimen Volume (minimum)

- ESwab
  - N/A (swab specimen)
  - Must have swab present in container
- Sterile Container
  - 0.5mL

Sample Stability Time

48 hours

Transport/Storage Conditions

- Refrigerated (2 – 8°C)
- Ambient (20 – 25°C)

Patient Preparation / Collection Instructions

- Cleanse skin or mucosal surfaces. For closed wounds and aspirates, disinfect as for a blood culture collection with 2% chlorhexidine or 70% alcohol followed by an iodine solution. Remove iodine with alcohol prior to specimen collection. For open wounds, debride (if appropriate), and thoroughly rinse with sterile saline prior to collection. Sample viable infected tissue, rather than superficial debris.
- Gently roll the swab over the wound's surface approximately five times, focusing on the area where there is evidence of pus or inflamed tissue. Abscesses that are closed off and not yet draining externally should be aspirated and the pus (purulent fluid) sent for culture. Aspirate infected material with a needle and syringe.
- Drainage fluids for culture should not be collected from the bag (due to organism overgrowth), it should be collected by direct aspiration of fluid from the area being drained or by aspiration of fresh fluid in the drainage tube after decontaminating the surface of the device.

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

4 – 6 days

Specimen Retention Time

7 days

Method Description

- Conventional aerobic bacterial culture technique with selective and non-selective media.
- Identification methods (when appropriate) may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels.
- Susceptibility testing (when appropriate) may include minimal inhibitory concentration (MIC) (broth microdilution or gradient strip diffusion) or disk diffusion.

Reference Values

No growth of pathogens.

Cautions

- Antibiotics administered prior to sample collection may negatively affect the recovery of organisms associated with infection. Preferably collect specimen prior to initiation of therapy and only from wounds that are clinically infected or deteriorating or that fail to heal over a long period.
- Many wound infections are polymicrobic and the isolation of an organism in culture may or may not correlate with infection of the wound.

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Created: 7/30/2024
Updated: 2/24/2025

Wound Culture (Aerobic, Anaerobic, Gram Stain) Information Sheet

Overview

MDL Test Name

Wound Culture – Aerobic, Anaerobic, Gram Stain

MDL Test Code

WNDAA_CULT

Ask at Order Questions

Was the wound specimen collected during surgery?

Specimen Source

Wound (specify source/site)

Specimen Requirements

Container/Tube

- ESwab - all swab collections
- Sterile Container - all aspirations/drainage

Specimen Volume (minimum)

- ESwab
  - N/A (swab specimen)
  - Must have swab present in container
- Sterile Container
  - 0.5mL

Sample Stability Time

48 hours

Transport/Storage Conditions

- Refrigerated (2 – 8°C)
- Ambient (20 – 25°C)

Patient Preparation / Collection Instructions

- Cleanse skin or mucosal surfaces. For closed wounds and aspirates, disinfect as for a blood culture collection with 2% chlorhexidine or 70% alcohol followed by an iodine solution. Remove iodine with alcohol prior to specimen collection. For open wounds, debride (if appropriate), and thoroughly rinse with sterile saline prior to collection. Sample viable infected tissue, rather than superficial debris.
- Gently roll the swab over the wound's surface approximately five times, focusing on the area where there is evidence of pus or inflamed tissue. Abscesses that are closed off and not yet draining externally should be aspirated and the pus (purulent fluid) sent for culture. Aspirate infected material with a needle and syringe.
- Drainage fluids for culture should not be collected from the bag (due to organism overgrowth), it should be collected by direct aspiration of fluid from the area being drained or by aspiration of fresh fluid in the drainage tube after decontaminating the surface of the device.

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

4 – 6 days

Specimen Retention Time

7 days

Method Description

- Conventional aerobic and anaerobic bacterial culture technique with selective and non-selective media.
- Identification methods (when appropriate) may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels.
- Susceptibility testing (when appropriate) may include minimal inhibitory concentration (MIC) (broth microdilution or gradient strip diffusion) or disk diffusion.

Reference Values

No growth of pathogens.

Cautions

- Antibiotics administered prior to sample collection may negatively affect the recovery of organisms associated with infection. Preferably collect specimen prior to initiation of therapy and only from wounds that are clinically infected or deteriorating or that fail to heal over a long period.
- Many wound infections are polymicrobic and the isolation of an organism in culture may or may not correlate with infection of the wound.

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