


Diagnostic Services Manitoba Inc. – Clinical Microbiology Procedure Manual	DSM Document # 120-10-05, V05
Section: Sample Collection	Original Date: JUN-2007
Issued By: Clinical Microbiology Standards Committee	Revision Date: 24-Jul-2014
Approved By: <i>Jan Karfaj</i>	Review Date: 24-Jul-2015



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Clinical Microbiology

Sample Collection Manual


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Site(s): All DSM Laboratories

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Approved by:	Dr. James Karlowsky	Written By:	Clinical Microbiology QI/Standards Committee
Signature:		Date:	21-Jul-2008
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1. Annual Review:


#	Reviewed by:	Date:	Approval:	Date:
1	Shirley Hoban	18-May-2010	Dr. M. Alfa	28-May-2010
2	Clinical Microbiology Discipline Committee	19-Apr-2011	Dr. M. Alfa	27-May-2011
3	Clinical Microbiology Discipline Committee	17-Jan-2013	Dr. M. Alfa	04-Mar-2013
4	Clinical Microbiology Discipline Committee	12-Mar-2014	Dr. J. Karlowsky	24-Jul-2014
5				

2. Summary of Revisions:

#	Details of Revisions:	Date:	Approval:	Date:
1	New document		Dr. M. Alfa	21-Jul-2008
2	<ul style="list-style-type: none"> Added transport time table Changed weight tables – blood culture draws Changed bone marrow collection to equal joint Haem/Micro policy Added collect information for STRA Changed information on vaginal swab to reflect current protocol Added a MRSA and VRE screens Added collection of vag/rectal for GBS screen 	18-May-2010	Dr. M. Alfa	18-May-2010
3	<ul style="list-style-type: none"> Added specified specimen volume for sputum cultures for AFB Added comment to indicate if patient is symptomatic or asymptomatic when submitting urine for bacterial culture Added UriSwab® to Appendix II Added information re: use of Isolator® and BacT/ALERT® MP culture bottles to blood culture section Added comment re: requirement for separate swab/ test requested to 1.0, 14.0 & 17.0 Added information re: UriSwab® for sample collection – midstream urine 	09-May-2011	Dr. M. Alfa	27-May-2011
4	<ul style="list-style-type: none"> Corrected AFB culture media for bone marrow to read MB bottle Added information re: appropriate sample packaging if samples are being referred out to all sample types Blood cultures: added information regarding line draws Feces: added information re: processing of duplicate samples same patient same day and multiple samples same patient submitted on different days Added peri-rectal and ostomy swabs for VRE detection MSU: added information re: submission of MSU sample on a male patient for Trichomonas Added information for collection of skin scrapings for Scabies 	17-Jan-2013	Dr. M. Alfa	04-Mar-2013

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#	Details of Revisions:	Date:	Approval:	Date:
5	<ul style="list-style-type: none"> • Added information for submission of samples for detection of <i>M. leprae</i> • Diagnostic Services of Manitoba changed to Diagnostic Services Manitoba throughout • Reference: Manual of Clin Micro revised in all instances throughout manual. • 1.0 Abscess – Comments: Acceptable transport systems added; info re: the number of swabs submitted added; second reference revised. • 3.0 Bite Wound – Device re: Tissue: info added for immersion into saline. • 4.0 Blood Culture – Comments: corrected bottle type for TB to read MB, not MP; new picture inserted for BacT/ALERT® PF Plus BC bottle. Added information re: blood culture collection for specific conditions. • 9.0 Burn – Info re: punch biopsy removed • 21.2 Feces, C. Diff – Rejection Criteria changed from 3 to 2 consecutive negative stools; Comments – info re: freezing removed. • 21.3 <i>H. pylori</i> Stool Antigen added; subsequent section renumbered. • 21.4 O&P – Info removed, refer to CPL • 23.0 Gastric Biopsy – <i>H. pylori</i>: Reference corrected from PML to Remel. • 25.0 Hair – bracketed comment added to Collection Instructions. • 26.0 Nail – Collection Instructions #3 revised; reference added. • 31.2 Scabies – Collection Instructions: point #3 ...drops “of mineral oil” added to sentence • 33.1 Sputum – Comments: second paragraph revised re: collection instructions for AFB • 34.0 Surveillance Culture for ARO’s – Added CPE to ARO listing; Peri-Rectal and Ostomy added to Specimen section; Collection Instructions for Ostomy added; added instructions for wound swabs for MRSA; “Unsoiled swabs will be rejected” added to Comments; new references added. • 39.2 Urine – Midstream: Last paragraph of Comments removed re: collection from a male for Trichomonas. • 39.4 Urine – <i>Schistosoma</i> spp.: refer to CPL • Appendix II, 1.0 – Local Transport added, subsequent section renumbered. • Appendix II, 2.0 – Revised to reflect “Distant Locations”; transit times in ‘days’ changed to ‘hours’; parasitology info removed. 	12-Mar-2014	Dr. J. Karlowy	24-Jul-2014

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Forward

Information contained in this manual has been derived from various references and represents “best practice” in regards Clinical Microbiology sample collection and transport. The guidelines were developed to provide for the optimal recovery of pathogenic microorganisms in samples submitted for microbiologic examination.

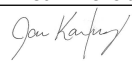
It should be noted that in certain geographic locations that the referenced transport times cannot be achieved. Every effort should be made to try to work within geographic transport limitations to endeavor to transport Clinical Microbiology samples in as timely a fashion as possible to the processing laboratory.

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SAMPLE COLLECTION

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APPENDIX I

- 1.0 Tests Performed at Cadham Provincial Laboratory

APPENDIX II

- 1.0 Local Transport
- 2.0 DSM Clinical Microbiology Specimen Acceptance Transport Time Guidelines: Distant Locations

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(Created September 20, 2006)

1.0**Specimen** **Abscess** (aspirate or swab)**Collection Instructions**

1. Remove surface exudate if present by wiping an open abscess with sterile saline or 70% alcohol.
2. Sample the leading edge of an open abscess. Sample must be acquired using aseptic technique.
3. A closed abscess should be aspirated with a needle and syringe after sterilizing skin with an iodine, chlorhexidine preparation or isopropyl alcohol wipes.
4. Follow protocols outlined by your health care facility for this sample type. Sampling of skin surface area can introduce colonizing bacteria not involved in the infectious process.

Device and/or minimal volume

Aspirate: anaerobic transport system, always submit as much sample as possible.



Swab: place in transport medium which will maintain anaerobe viability.

**Storage/Transport**

Local: Swab – transport as soon as possible, hold sample at room temperature.

Aspirate – ≤24 hrs, hold at room temperature.

Courier/local storage: Swab or abscess fluid – ≤24 hrs at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services Manitoba Sample Acceptance Policy).

Comments

Aspirate if possible; an aspirate is always superior to a swab specimen. Swab samples are suboptimal for bacterial culture (aerobic or anaerobic) because of low specimen collection volume and exposure to oxygen (anaerobes). If abscess is open, ensure all pus and cellular debris is removed, then swab deep into the lesion and firmly sample the lesions advancing edge.

If aspirate is obtained, do not submit sample in needle and syringe; inject sample into appropriate transport container. Acceptable transport systems: Copan M40® swab, 3D Port A Cul®.

Indicate antimicrobial therapy on ordering requisition.

If requests are being made for more than one test on a swab taken from a specific site, i.e. bacterial culture aerobes, bacterial culture anaerobes and fungus culture, please ensure that a separate swab sample is submitted for each test requested. Failure to provide separate swabs will result in sub optimal microbiology culture results and a call being made by from the Clinical Microbiology Laboratory to prioritize testing in accordance with the number of swabs submitted. Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

2.0**Specimen Bartholin Cyst Fluid – Culture****Collection Instructions**

1. Disinfect skin with chlorhexidine preparation
2. Using a sterile needle and syringe, aspirate fluid from ducts
3. Transfer sample into anaerobic transport system

Device and/or minimal volume

Anaerobic transport system

**Storage/Transport**

Local – ≤2 hrs at room temperature.

Courier/local storage – ≤24 hrs at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Do not submit sample in needle and syringe for culture.

Indicate antimicrobial therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

3.0

Specimen Bite Wound**Collection Instructions**

1. Remove surface exudate by wiping with sterile saline or 70% alcohol. Sample must be acquired using aseptic technique.
2. Sample the leading edge of infected wound.
3. Follow protocols outlined by your health care facility for this sample type. Sampling of skin surface area can introduce colonizing bacteria not involved in the infectious process.

Device and/or minimal volume

Swab: place in transport medium which will maintain anaerobe viability.



Tissue/Aspirated fluid: Anaerobic transport system required if transport time to laboratory >2 hrs or if small piece of tissue collected. If tissue sent without anaerobic transport system, add 1 mL sterile saline, ensure tissue is immersed in the saline to prevent sample desiccation.

**Storage/Transport**

Local transport: Swab – transport as soon as possible, hold sample at room temperature.

Courier/local storage: Swab, tissue or aspirated fluid – ≤24 hrs at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Do not culture animal bite wounds ≤12 hrs old as agents are usually not recovered unless bites are on the face or hand or there is evidence of infection. Indicate type of bite wound, i.e. human or animal, on the ordering requisition.

Tissue or aspirated fluid are the preferred specimens for culture.

Indicate antimicrobial therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

4.0

Specimen Blood Culture

Collection Instructions

1. Disinfect rubber stopper on the culture bottle using 70% isopropyl alcohol, wait one minute.
2. Disinfect palpated venipuncture site using a chlorhexidine/70% alcohol swab by using a back and forth friction rub to cleanse the skin, cleanse for 15 seconds over a 4 cm x 4 cm area.
3. Allow to dry (do not repalpate vein).
4. Collect blood using needle and syringe or safety butterfly. **Note:** Bottle adaptors must be used with butterfly collections.

Device and/or minimal volume (see comments re: requests culture of fungus (fungemia), Legionella, Bartonella or AFB (Mycobacteria))

Volumes

Adult: 30 mL – aerobic (10 mL) and anaerobic (10 mL) from one peripheral site, aerobic (10 mL) from second peripheral site.



Pediatric:

<u>Weight</u>	<u>Required Blood Volume</u>	<u>Number of bottles</u>
<4 kg	0.5–1 mL	1 pediatric
4 - <9 kg (<20 lbs)	2-4 mL	1 pediatric
9-27 kg (20-60 lbs)	10 mL	3 pediatric or 1 adult aerobic
28 kg (61+ lbs)	30 mL	2 adult aerobic and 1 adult anaerobic



Acute febrile episode:

30 mL from 2 separate peripheral sites, all within 10 minutes, prior to antimicrobials

Non-acute disease (antimicrobial will not be started or changed immediately):

30-50 mL from 2 or 3 separate peripheral sites, all within 24 hours at intervals no closer than 3 hours (collect 30 mL as described above and then aerobic [10 mL] and anaerobic [10 mL] from a third peripheral site).

Endocarditis (acute):

Obtain three blood cultures during the first 1-2 hours of evaluation. If all are negative 24 hours later, obtain three more. From patients who have received antimicrobial agents within 2 weeks prior to admission, obtain two separate blood cultures on each of three successive days.

Fever of unknown origin:

Obtain two to three blood cultures immediately. Then, 24-36 hours later obtain two more cultures immediately before expected (usually afternoon) temperature elevation.

Pediatric:

Collect immediately, rarely necessary to document continuous bacteremia with hours between cultures. Collect blood volume based upon patient weight not age.

Storage/Transport

Local: as soon as possible, hold at room temperature.

Courier/local storage: ≤24 hrs, hold at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Do not incubate blood culture prior to submitting to lab. If blood cultures are drawn from lines, Indicate antimicrobial therapy on ordering requisition.

If fungemia (fungal infection – excludes yeast) is suspected, blood cultures must be drawn using an Isolator® (lysis centrifugation) tube. Contact the Clinical Microbiology laboratory prior to ordering.

If *Legionella* or *Bartonella* infection is suspected, blood cultures must be drawn using an Isolator®, Contact the Clinical Microbiology laboratory prior to ordering.

If AFB (Mycobacteria) is suspected the blood cultures must be drawn in BacT/ALERT® MB bottles. Contact the Clinical Microbiology laboratory prior to ordering.

If a line draw is necessary, ensure that a peripheral blood culture sample is also collected. There is no requirement to flush the line prior to collection. An accompanying peripheral blood culture is essential because of the higher contamination rate associated with line collections.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Cumitech IC Blood Cultures IV, 2006. Baron E.J., Weinstein M.P., Dunne W.M., Yagupsky P., Welch D.F. & Wilson D.M. American Society of Microbiology, Washington, D.C.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

Procedure for Collection of Diagnostic Blood Specimen by Venipuncture. CLSI Approved Standards, 6th Edition. H3-A6, Vol. 27, No. 26

5.0**Specimen Bone Marrow****Collection Instructions**

1. Prepare puncture site as per surgical incision.
2. Sample must be acquired using aseptic technique.
3. Follow protocols outlined by your health care facility for this sample type.

Device and/or minimal volume

If sample is set up for requested tests at the patient bedside, culture as follows:

Bacterial culture Aseptically inoculate 0.5–2 mL into a pediatric blood culture bottle.

AFB (Mycobacteria) Aseptically inoculate 3–5 mL into a BacT MB® bottle plus 2-3 drops onto a Lowenstein-Jensen (LJ) agar slant.

Fungal culture Aseptically inoculate 2-3 drops onto a SABHI agar slant.

If sample cannot be inoculated onto appropriate culture media at the patient bedside, submit as much volume as possible in a sterile, screw capped specimen container.

Storage/Transport

Local: as soon as possible.

Courier/local storage: ≤24 hrs at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Routine bacterial culture of bone marrow is rarely useful.

Indicate antimicrobial therapy or antifungal therapy on ordering requisition.

Sample inoculation should be performed at the patient bedside.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy. If sufficient volume has not been collected to inoculate both an MB bottle and LJ slant, only the LJ slant should be inoculated.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

Bone Marrow Collection – Aspirate and Biopsy Samples DSM #140-50-17

6.0**Specimen Bronchial Brushing – Culture****Collection Instructions**

Follow procedure outlined by your health care facility.

Device and/or minimal volume

Submit aseptically handled brush in sterile screw capped container with 1.0 mL sterile saline.

**Storage/Transport**

Local: ≤2 hrs, store at room temperature.

Courier/local storage: ≤48 hrs (≤24 hrs optimal), store at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Indicate recent antimicrobial therapy or antifungal therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

7.0**Specimen Bronchial Washing – Culture****Collection Instructions**

Follow procedure outlined by your health care facility.

Device and/or minimal volume

Sterile screw capped container, minimum volume at >1 mL.
Always submit as much sample as possible.

**Storage/Transport**

Local: ≤2 hrs, store at 4°C.

Courier/local storage: ≤24 hrs, store at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Increased volume of sample facilitates the isolation of pathogenic fungi and Mycobacteria.

Indicate antimicrobial therapy or antifungal therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

8.0**Specimen Broncho-Alveolar Lavage (BAL) – Culture****Collection Instructions**

Follow procedure outlined by your health care facility.

Device and/or minimal volume

Sterile screw capped container. 40-80 mL is required for quantitative analysis.

**Storage/Transport**

Local: ≤2 hrs, store at 4°C.

Courier/local storage: ≤24 hrs, store at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Increased volume of sample facilitates the isolation of pathogenic fungi and mycobacteria.

Indicate antimicrobial therapy or antifungal therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

9.0**Specimen** **Burn** (tissue or exudate swab)**Collection Instructions**

1. Clean and debride the wound prior to specimen collection.
2. Add several drops of sterile saline to prevent sample from drying if specimen cannot be delivered immediately to the lab.

Device and/or minimal volume

Tissue (after debridement): Place in sterile screw capped container.



Swab of exudate: Place swab in transport medium.

**Storage/Transport**Local: Transport as soon as possible to laboratory (≤ 15 minutes).Courier/local storage: ≤ 24 hrs, store at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.**Rejection Criteria**

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Surface cultures of burn wounds may be misleading.

Indicate antimicrobial therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

ReferencesA Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

10.0**Specimen Catheter** (intravenous or intra-arterial)**Collection Instructions**

1. Cleanse skin around site with 70% alcohol.
2. Aseptically remove catheter and clip the 5 cm distal tip of the catheter into a sterile screw capped transport container.

Device and/or minimal volume

Place sample in sterile screw capped container.

**Storage/Transport**

Local: Transport as soon as possible to prevent drying, hold at 4°C.

Courier/local storage: ≤24 hrs, store at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Wound drainage tips and foley catheter tips are not suitable for culture and will be rejected.

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Acceptable IV catheter types for semiquantitative culture: Central, CVP, Hickman, Broviac, peripheral, arterial, umbilical, hyperalimentation and Swan Ganz.

Indicate antimicrobial therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

ReferencesA Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

11.0**Specimen Cerebrospinal Fluid (CSF)****Collection Instructions**

1. Sample must be acquired using aseptic technique.
2. Follow protocols outlined by your health care facility for this sample type.
3. Submit the second or third tube collected for microbiologic examination.

Device and/or minimum volumeBacteria: ≥ 1 mLFungi: ≥ 2 mLAFB: ≥ 2 mLVirus: ≥ 1 mL

Submit in sterile screw capped container.

**Storage/Transport**Local: Transport as soon as possible (≤ 15 minutes), hold at room temperature.Courier/local storage: ≤ 24 hrs at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.**Rejection Criteria**

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

CommentsAvoid the use of larger capacity sterile containers (≥ 90 mL) as small samples are difficult to retrieve.Samples being submitted for viral cultures only should be held/stored at 4°C.**Do not submit samples for microbiologic investigation on ice.** Tube #1 is sub-optimal for microbiologic investigation.

Indicate antimicrobial therapy or antifungal therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

ReferencesA Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

12.0**Specimen Cervical Swab – Culture for *N. gonorrhoeae*****Collection Instructions**

1. Visualize the cervix using a speculum without lubricant.
2. Remove mucus and secretions from the cervix with a sterile swab, discard the swab.
3. Sample the endocervical canal with a newly obtained sterile dacron or rayon swab.

Device and/or minimal volume

Swab transport medium.

**Storage/Transport**

Local: ≤2 hrs at room temperature.

Courier/local storage: ≤24 hrs at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Do not use calcium alginate or cotton swabs as they may be inhibitory to *N. gonorrhoeae*.

Transport as soon as possible to the lab. Viability of *N. gonorrhoeae* held in transport medium decreases substantially after prolonged storage.

Direct inoculation of patient sample to appropriate bacteriologic media at the bedside (if available) has been shown to increase the sensitivity of culture.

Non-culture techniques for the detection of *N. gonorrhoeae*, i.e. molecular, are done by Cadham Provincial Laboratory, refer to Appendix I.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

13.0**Specimen Corneal Scrapings****Collection Instructions**

1. Sample must be acquired using aseptic technique.
2. Follow protocols outlined by your health care facility for this sample type.

Device and/or minimal volume

Direct culture at bedside using blood agar, chocolate agar and a medium for fungal culture. Slides of sample should also be prepared.

Submit plates in sample biobag. Submit slide(s) in slide holder.

Storage/Transport

Local: Transport as soon as possible, store plates at room temperature.

Courier/local storage: ≤24 hrs, store plates and slide at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Anesthetics may be inhibitory to some etiologic agents, a conjunctival sample may be collected prior to collecting corneal scrapings.

Indicate antimicrobial therapy or antifungal therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

14.0**Specimen Decubitus Ulcer****Collection Instructions**

1. Cleanse surface with sterile saline.
2. If an aspirate or biopsy of the lesion cannot be taken, vigorously swab the base of the lesion.

Device and/or minimal volume

Tissue biopsy: submit in sterile screw capped container

Aspirate: submit in sterile screw capped transport container which will maintain anaerobe viability

Swab: submit in transport medium suitable for aerobe and anaerobic cultures

**Storage/Transport**

Local: Biopsy or aspirate – transport as soon as possible, hold at room temperature.

Courier/local storage: All sample types – ≤24 hrs, store at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

A swab sample taken from a decubitus ulcer provides little to no useful clinical information. A tissue biopsy or aspirate is the preferred sample.

Indicate antimicrobial therapy on ordering requisition.

If requests are being made for more than one test on a swab taken from a specific site, i.e. bacterial culture aerobes, bacterial culture anaerobes and fungus culture, please ensure that a separate swab sample is submitted for each test requested. Failure to provide separate swabs will result in sub optimal microbiology culture results.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

15.0**Specimen** **Dental Culture** (gingival, peridontal, periapical, Vincent's stomatitis [trench mouth])**Collection Instructions**

1. Carefully cleanse gingival margin and supragingival tooth surface to remove saliva, debris and plaque.
2. Using a peridontal scaler, remove subgingival lesion material and place in transport system.
3. Prepare a smear for staining.

Device and/or minimal volume

Anaerobic transport system.

**Storage/Transport**Local: Transport as soon as possible (≤ 2 hrs), hold at room temperature.Courier/local storage: ≤ 24 hrs at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.**Rejection Criteria**

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Indicate antimicrobial therapy or antifungal therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

ReferencesA Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

16.0

Specimen **Device Culture** (orthopedic hardware, heart valve, etc)

Collection Instructions

1. Sample must be acquired using aseptic technique.
2. Follow protocols outlined by your health care facility for this sample type.

Device and/or minimal volume

Sterile screw capped specimen container.

**Storage/Transport**

Local: ≤2 hrs at room temperature, ≤24 hrs at 4°C.

Courier/local storage: ≤24 hrs at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

17.0**Specimen Ear (inner and outer)****Collection Instructions**

1. Inner ear: Sample must be acquired using aseptic technique. Follow protocols outlined by your health care facility for this sample type.
2. Outer ear: Use a swab moistened with sterile physiologic saline to remove any debris or crust from the ear canal. Obtain sample by firmly rotating swab in the outer canal.

Device and/or minimal volume

Fluid sample: Submit in sterile screw capped container. Always submit as much sample as possible.

Swab: Submit in transport medium.

**Storage/Transport**

Local: Fluid or swab – transport as soon as possible (≤ 2 hrs), store at room temperature.

Courier/local storage: Fluid or swab – ≤ 24 hrs, store fluid at room temperature, store swab at 4°C

Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Tympanocentesis should be reserved for complicated, recurrent or chronic persistent otitis media.

For otitis externa, vigorous swabbing is required after debris or crust has been removed since surface swabbing may miss pathogens.

Indicate antimicrobial therapy on ordering requisition.

If requests are being made for more than one test on a swab taken from a specific site, i.e. bacterial culture aerobes, bacterial culture anaerobes and fungus culture, please ensure that a separate swab sample is submitted for each test requested. Failure to provide separate swabs will result in sub optimal microbiology culture results.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

18.0**Specimen Esophageal Brushing****Collection Instructions**

Follow protocols outlined by your health care facility for this sample type.

Device and/or minimal volume

Place brush in sterile screw capped specimen container to which approximately 2 mL of sterile normal saline has been added.

**Storage/Transport**

Local: ≤ 2 hrs, store at room temperature.

Courier/local storage: ≤ 48 hrs (≤ 24 hrs optimal), store at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Indicate any recent antifungal therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

Clinical Laboratories of Hawaii: LLP & Pan Pacific Pathologists Inc. Cytology Specimen Collection Manual

19.0**Specimen Eye (conjunctiva)****Collection Instructions**

1. Sample eye using swab pre-moistened with sterile saline.
2. Roll swab over conjunctiva.

Device and/or minimal volume

Submit swab in transport medium.

**Storage/Transport**

Local: ≤2 hrs, hold at room temperature.

Courier/local storage: ≤24 hrs, hold at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

If possible, sample both conjunctivae even if only one is infected. The uninfected eye can serve as a control to compare to the agents isolated from the infected eye.

Indicate antimicrobial therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

20.0**Specimen Eye/Corneal Scraping – *Acanthamoeba* Culture****Collection Instructions**

1. Instill 2 drops of local anesthetic into the conjunctival sac and/or onto the corneal epithelium.
2. Using a sterile spatula, scrape ulcers or lesions and inoculate a pre-prepared non-nutrient agar plate coated with a bacterial overlay of *E. coli*.

Device and/or minimal volume

Direct inoculum of non-nutrient agar coated with a bacterial overlay of *E. coli*.

If a direct inoculum is not available, place scrapings in Page's saline and transport immediately to the laboratory.

Storage/Transport

Local: ≤15 minutes at room temperature (Page's saline).

Courier/local storage: ≤4 hrs at room temperature (inoculated plate). Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Collection of samples for *Acanthamoeba* Culture requires prior consultation with the laboratory. Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

21.0 Feces (stool)

21.1

Specimen **Feces (stool) – Routine culture** (*Salmonella*, *Shigella*, *Campylobacter* and *E. coli* O157:H7)

Collection Instructions

1. Sample should be passed directly into a clean, sterile container. Avoid contaminating sample with urine.
2. Transport the sample promptly to the laboratory (≤ 1 hour). If transport is delayed, transfer a portion of the sample to an enteric pathogen transport medium such as Cary Blair® or transfer a portion of the sample to a swab transport system such as Copan M40® or Amies. The swab must have a visible amount of specimen.

Device and/or minimal volume

Clean/sterile, leak-proof screw capped container or a transport system; ≥ 5 gm (≥ 5 mL).

Delayed transport: Use swab transport system or transport medium for stool sample which has been formulated to maintain viability of enteric pathogens.



Storage/Transport

Local transport, unpreserved sample: ≤ 1 hr at room temperature, ≤ 24 hrs at 4°C.

Local transport, sample in transport medium: ≤ 24 hrs at 4°C or room temperature.

Courier/local storage, unpreserved sample: ≤ 24 hrs at 4°C.

Courier/local storage, sample in transport medium: ≤ 48 hrs at 4°C or room temperature.

Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Routine stool cultures for enteric pathogens are not performed on samples taken from patients who have been hospitalized for >72 hrs unless there are extenuating circumstances.

Samples submitted in enteric transport medium must have appropriate sample to preservative ratio.

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services Manitoba Sample Acceptance Policy).

Duplicate samples submitted on the same day, only one sample will be processed. If multiple stool samples are submitted on different days, no more than two samples per patient will be accepted for culture.

Comments

Rectal swabs for routine pathogens are not recommended except in infants.

If enteric pathogen other than stated above is suspected, please indicate on ordering requisition.

Bloody or liquid stools collected within 6 days of onset from patients with abdominal cramps have the highest yield for culture positive *E. coli* O157. Toxin assay is better than culture alone for the diagnosis of toxin mediated diarrhoeal disease.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

21.2**Specimen Feces (stool) – *C. difficile* Toxin Assay****Collection Instructions**

Pass liquid or soft stool into a sterile container. Avoid contaminating sample with urine.

Device and/or minimal volume

Sterile/clean, leak-proof screw capped container. Volume: ≥ 5 mL

**Storage/Transport**

Local: ≤ 1 hr at room temperature, ≤ 24 hrs at 4°C.

Courier/local storage: ≤ 3 days at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Formed stool will not be tested unless there is an indication that the patient has toxic megacolon.

Samples on infants (≤ 1 year of age) will not be tested.

No more than 2 consecutive negative stools will be tested on a single patient.

Formed stool (no diagnosis of toxin megacolon) will not be processed – stool sample must be liquid, i.e. take the shape of the container.

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

C. difficile toxin assays should not be used to determine test of cure.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

21.3**Specimen Feces (stool) – *H. pylori* Stool Antigen****Collection Instructions**

Solid or formed, semi-solid and liquid stool samples can be tested.

Device and/or minimal volume

Sterile/clean, leak-proof screw capped container. Volume: ≥ 5 mL

**Storage/Transport**

Local: ≤ 1 hr at room temperature, ≤ 24 hrs at 4°C.

Courier/local storage: ≤ 3 days at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Stool submitted in transport media, stool swabs or stool samples mixed with preservatives are unacceptable.

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

The sample should be tested as soon as possible but may be held for up to 72 hours at 2-8°C prior to testing.

Testing is limited to samples or tests being referred by a DSM facility, all other test requests must be cleared by a Microbiologist.

References ImmunoCard STAT! HpSA Package Insert

21.4**Specimen Feces (stool) – Ova & Parasites**

Please reference the Cadham Provincial Laboratory “Guide to Services” for sample collection and submission.

22.0

Specimen Fluids (Includes all aseptically obtained fluids such as: abdominal, amniotic, ascites, bile, joint, paracentesis, pericardial, peritoneal, pleural, synovial, continuous ambulatory peritoneal dialysis fluid (CAPD) and thoracentesis)

Collection Instructions

1. Sample must be acquired using aseptic technique.
2. Follow protocols outlined by your health care facility for this sample type.

Device and/or minimal volume

Sterile screw capped transport container. Volume as follows:

Bacterial Culture	≥1 mL
Fungal Culture	≥10 mL
AFB (Mycobacteria) Culture	≥10 mL

**Storage/Transport**

Local: Transport as soon as possible, hold at room temperature.

Courier/local storage: ≤24 hrs at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Always submit as much fluid as possible, do not submit a swab dipped in fluid.

If anaerobes are suspected, sample should be transported in anaerobic transport system.

Indicate antimicrobial therapy or antifungal therapy on ordering requisition.

Where local protocol allows, the CAPD bag may be submitted to the testing laboratory.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

23.0**Specimen Gastric Biopsy – *H. pylori*****Collection Instructions**

Follow protocols outlined by your health care facility for this sample type.

Device and/or minimal volume

Sterile screw capped specimen container.
Modified Cary Blair transport medium (picture not available).
Rapid Urease medium (picture not available).

**Storage/Transport**

Local: Transport as soon as possible, hold at room temperature.
Courier/local storage: ≤24 hrs at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Delays in transport will result in the death of *H. pylori* and will lead to false negative lab results, add 1 mL of sterile phosphate buffered saline to the sample if local transport is delayed to prevent drying.

Do not place sample in formalin.

Submission of biopsies to an off site reference lab for *H. pylori* culture is best achieved by using an anaerobic transport medium. If sample is being forwarded to an off site reference lab for rapid urease determination, use a commercial rapid urease medium to transport the sample.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

Clinical Microbiology Procedures Handbook, 2nd Edition, 2004. Henry D. Isenberg, American Society for Microbiology. Washington, DC

Remel® Package Insert IFU 20389

24.0**Specimen Gastric Wash or Lavage – Mycobacteria****Collection Instructions**

1. Collect first thing in the morning before patient eats.
2. Follow protocols outlined by your health care facility for this sample type.

Device and/or minimal volume

Sterile screw capped, leak-proof container.

**Storage/Transport**

Local: Transport to lab as soon as possible (≤ 15 minutes), hold at 4°C.

Courier/local storage: ≤ 24 hrs at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

*If delay is more than 4 hours add 100 mg of sodium carbonate to neutralize acidity.

Rejection Criteria

Gastric wash is inappropriate for routine bacterial culture.

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Failure to transport the sample within the defined time frames may lead to the death of AFB (Mycobacteria) as the organisms die rapidly in non-neutralized samples.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Clinical Microbiology Procedures Handbook, 2nd Edition, 2004. Henry D. Isenberg, American Society for Microbiology

25.0**Specimen** **Hair** (Dermatophyte Culture)**Collection Instructions**

1. Using forceps pluck at least 10-12 affected hairs with the base of the shaft intact (hair root is important for good culture results). Place hairs in a sterile container and submit.
or
2. Using a new soft bristle toothbrush, rub affected area to collect hair and scale; submit brush.

Device and/or minimal volume

Sterile (or clean) screw capped container; minimum of 10 hairs.

**Storage/Transport**

Local: ≤24 hrs, store at room temperature.

Courier/local storage: ≤48 hrs, store at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Collect scalp scales, if present, along with scrapings of active borders. Indicate any recent antifungal therapy.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

ReferencesA Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Brush Culture Method for Diagnosing Tinea Capitis, 1992; 90; 416-418. Thomas W. Hubbard, John M. deTriguet. Pediatrics (Official Journal of the American Academy of Pediatrics)

26.0**Specimen** **Nail** (Dermatophyte Culture)**Collection Instructions**

1. Wipe the nail using 70% alcohol using gauze, not cotton.
2. Clip a portion of the area or collect material by scraping deeply enough to obtain recently invaded nail tissue.
3. Place material in sterile container, dry paper envelope or folded black paper.

Device and/or minimal volume

Sterile (or clean) screw capped container. Obtain enough scrapings to cover the head of a thumb tack.

**Storage/Transport**

Local: ≤24 hrs, store at room temperature.

Courier/local storage: ≤48 hrs, store at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Indicate any recent antifungal therapy.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Medically Important Fungi, 5th Edition, 2011. Davise H. Larone

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

27.0**Specimen Nasal Swab****Collection Instructions**

1. Insert the swab, pre-moistened with sterile physiologic saline, ≈2 cm into the nares.
2. Rotate the swab against the nasal mucosa.

Device and/or minimal volume

Submit swab in transport medium.

**Storage/Transport**

Local: ≤2 hrs, store at room temperature.

Courier/local storage: ≤48 hrs (≤24 hrs optimal), store at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Anterior nose cultures are reserved for identifying staphylococci carriers or for nasal lesions only. Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

28.0**Specimen Nasopharyngeal Aspirate****Collection Instructions**

Follow protocols outlined by your health care facility for this sample type.

Device and/or minimal volume

Sterile screw capped specimen container.

**Storage/Transport**

Local: ≤2 hrs, store at room temperature.

Courier/local storage: ≤48 hrs (≤24 hrs optimal), store at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Nasopharyngeal aspirates are reserved primarily for the detection of *Bordetella pertussis*. Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

29.0**Specimen Nasopharyngeal Swab****Collection Instructions**

1. Gently insert a nasal pharyngeal swab into the posterior nasopharynx via the nose.
2. Rotate the swab slowly 5 seconds to absorb secretions.
3. Place swab in transport medium.

Device and/or minimal volume

Submit swab in transport medium.

Dry nasopharyngeal swabs are acceptable for PCR for Bordetella

**Storage/Transport**

Local: ≤2 hrs, store at room temperature.

Courier/local storage: ≤48 hrs (≤24 hrs optimal), store at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Nasopharyngeal swabs are predominantly submitted for Bordetella. If an alternate etiologic agent, i.e. *C. diphtheriae*, is suspected, please indicate on requisition.

If transport media is unavailable, a dry swab is acceptable for PCR for Bordetella.

Samples being submitted for PCR for Bordetella should be obtained using a Dacron or rayon swab (not cotton or calcium alginate swab).

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

30.0**Specimen Pinworm Examination****Collection Instructions**

1. Gently press the sticky side of a pinworm paddle or clear scotch tape (hold tape with forceps or place over butt end of test tube or tongue depressor) against several areas of the perianal region while spreading open the perianal folds.
2. Place paddle in the transport container and tighten the cap or place the scotch tape, sticky side down, onto a clear microscope slide. Place slide in transport container.

Device and/or minimal volume

Pinworm paddle kit.

Clear scotch tape, glass slide(s) and sterile screw capped specimen container.

**Storage/Transport**

Local: ≤24 hrs at room temperature.

Courier/local storage: ≤24 hrs at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Sample collection is best performed in the morning prior to defecation.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Dewitt Health Care Network, Dewitt Army Hospital, Fort Belvoir, Va, 2006

31.0 Skin Scraping

31.1

Specimen **Dermatophyte Culture**

Collection Instructions

1. Cleanse the affected area with 70% alcohol.
2. Gently scrape the surface of the skin at the active margin of the lesion, **do not draw blood**.
3. Place sample in a clean container or on black glassine paper (if available) then into a clean container.

Device and/or minimal volume

Sterile screw capped container. Obtain enough scrapings to cover the head of a thumb tack.



Storage/Transport

Local: ≤24 hrs, store at room temperature.

Courier/local storage: ≤48 hrs, store at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Indicate any recent antifungal therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Medical Mycology, K. J. Kwon, John E. Bennett

31.2**Specimen Scabies****Collection Instructions**

1. Obtain glass slides with frosted ends and coverslips from the laboratory.
2. Label the frosted end of the glass slide with the patient's name and PHIN number.
3. Add one to two drops of mineral oil on each of the microscope slides (frosted side up).
4. Examine the infected area for "burrows" which often appear as slightly elevated and greyish in colour.
5. Cleanse skin area to be sampled with an alcohol wipe.
6. Dip the blade of a sterile #15 scalpel into the mineral oil on the slide and transfer a small drop to the skin surface to be scraped.
7. Take the scraping using the scalpel held at a 90° angle to the skin while holding the skin taut. Scabies burrow into the skin so it is important to get as much skin as possible.
8. Take the scraped skin sample and suspend into the mineral oil drops on the slides.
9. Place a coverslip on top of each of the suspensions.
10. Transfer the slides to a slide holder and submit immediately to the laboratory.

Device and/or minimal volume

Not applicable

Storage/Transport

Local: as soon as possible.

Courier/local storage: ≤24 hrs, store at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services Manitoba Sample Acceptance Policy)

Comments

If slides are being sent to a reference laboratory coverslips should be rimmed to prevent drying by using Vaseline or nail polish.

References

Missouri State Public Health Laboratory Scabies Collection Instructions (revised 2/3/11)

32.0 Skin Slits (*M. leprae*)

Instructions: <http://www.hrsa.gov/hansensdisease/diagnosis/skinsmears.html>

Form with Diagram: <http://www.hrsa.gov/hansensdisease/pdfs/biopsychart.pdf>

33.0 Sputum

33.1

Specimen **Sputum – Expecterated**

Collection Instructions

1. Sample should be collected under the direct supervision of a nurse or physician.
2. Have the patient rinse or gargle with water to remove superficial flora.
3. Instruct patient to cough deeply to produce lower respiratory secretions.
4. Collect in sterile container.

Device and/or minimal volume

Sterile screw capped container, no preservatives.



Storage/Transport

Local: ≤2 hrs, store at room temperature.

Courier/local storage: ≤48 hrs (≤24 hrs optimal), store at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Samples will be screened microscopically by laboratory to detect unsuitable samples, i.e. saliva. Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Respiratory therapists should collect a specimen via suction from pediatric patients unable to produce a sputum sample.

Initial diagnostic testing for AFB culture: Submit three respiratory specimens collected at least one hour apart within one to three days. Preferably with at least one early morning collection. Follow up testing for AFB: Collect three samples 8-24 hours apart, preferably with one early morning collection.

Optimal volume for AFB (Mycobacteria) culture is 5-10 mL, minimum volume at 3 mL.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Clinical Microbiology Procedures Handbook 3rd. Ed, 2010, Lynne S. Garcia Ed. American Society for Microbiology Washington, DC

33.2**Specimen Sputum – Induced****Collection Instructions**

1. Have the patient rinse the mouth with water after brushing the gums and tongue.
2. Using a nebulizer, have the patient inhale \approx 25 mL of a 3-10% sterile saline solution.
3. Collect induced specimen in a sterile container.

Device and/or minimal volume

Sterile screw capped container, no preservatives.

**Storage/Transport**

Local: \leq 2 hrs, store at room temperature.

Courier/local storage: \leq 48 hrs (\leq 24 hrs optimal), store at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Indicate antimicrobial therapy on ordering requisition.

The optimum volume for samples on which AFB (Mycobacteria) culture is requested is 5-10 mL, minimum volume at 3 mL.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

34.0

Specimen **Surveillance Culture for Antimicrobial Resistant Organisms** – MRSA (Methicillin Resistant *S. aureus*), VRE (Vancomycin Resistant Enterococcus), CPE (Carbapenamase Producing *Enterobacteriaceae*)
 Nasal swab: MRSA
 Wound swab: MRSA
 Rectal swab: VRE and CPE
 Peri-Rectal (only applies to GD6 at HSC or pediatric patients): VRE and CPE
 Ostomy: VRE and CPE

Collection Instructions

- A. Nasal Swab
 1. Insert the swab, pre-moistened with sterile physiologic saline, approximately 2 cm into the nares.
 2. Rotate the swab against the nasal mucosa. **Note:** Both nares should be sampled using the same swab.
- B. Wound Swab – If wound is dry, moisten a swab with sterile physiologic saline and collect the sample. Collect surveillance cultures before cleansing.
- C. Rectal Swab
 1. Insert the swab into the rectum (through anal sphincter), gently rotate.
- D. Peri-Rectal Swab
 1. Swab the peri-rectal area.
- E. Ostomy – Follow sample collection procedure recommended by Infection Prevention and Control.

Device and/or minimal volume

Submit swab in transport media.

**Storage/Transport**

Local: ≤2 hrs, store at room temperature.

Courier/local storage: ≤48 hrs (≤24 hrs optimal), store at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Rectal swabs submitted for VRE or CPE screening should be visibly soiled with fecal material.

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Rectal swabs, peri-rectal swabs (from the Children's Hospital or GD6 at the Health Sciences Ctr.) and GI ostomy swabs are acceptable samples.

The rectal swab should be visibly soiled. Unsoiled swabs are sub-optimal; a negative culture result can't be used to accurately rule out the presence of VRE/CPE.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

CPE screening cultures must be cleared by a Microbiologist.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

Countess of Chester Hospital MRSA Screening Policy, Dr. Virginia Clough, 2010

Guidelines for the Control and Prevention of Methicillin-Resistant *Staphylococcus aureus* (MRSA) in Healthcare Facilities by the Joint BSCA/HIS/ICNA Working Party on MRSA, Journal of Hospital Infection, 2006, 63:S1-S44

35.0**Specimen Throat Swab****Collection Instructions**

1. Depress the tongue with a tongue depressor.
2. Sample the posterior pharynx, tonsils and inflamed areas.

Device and/or minimal volume

- Submit swab in transport medium for culture.
- Submit dry swab in sterile container for antigen detection.

**Storage/Transport**

- Local: ≤2 hrs, store at room temperature.
- Courier/local storage: ≤48 hrs (≤24 hrs optimal), store at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Throat cultures are contraindicated for patients with an inflamed epiglottis. For specific etiologic agents, i.e. *C. diphtheriae*, please provide information to performing laboratory. Throat swabs for *N. gonorrhoeae* should be transported to the laboratory as soon as possible. Ideally throat swabs samples being submitted for Group A Streptococcal antigen on pediatric patients should be submitted using both a dry swab and a swab in transport medium to allow for culture confirmation of negative Group A Streptococcal antigen test results. Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

36.0**Specimen Tissue/Biopsy Sample****Collection Instructions**

1. Sample must be acquired using aseptic technique.
2. Follow protocols outlined by your health care facility for this sample type.
3. For small samples add several drops of sterile saline to keep moist. Do not allow tissue to dry out.

Device and/or minimal volume

Anaerobic transport system or sterile screw capped specimen container. Do not add preservative. Always submit as much tissue as possible.

**Storage/Transport**

Local: Transport as soon as possible to laboratory (≤ 15 minutes).

Courier/local storage: ≤ 24 hrs, store at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Always submit as much tissue as possible.

Never submit a swab that has been simply rubbed over the surface of the tissue.

Some *Legionella* may be inhibited by saline.

Indicate antimicrobial therapy or antifungal therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

37.0**Specimen Tracheal Secretion****Collection Instructions**

1. Follow protocols outlined by your health care facility for this sample type.
2. Place aspirate in a trap or sterile container.

Device and/or minimal volume

Sterile trap or sterile screw capped specimen container.

**Storage/Transport**

Local: ≤ 2 hrs, store at room temperature.

Courier/local storage: ≤ 48 hrs (≤ 24 hrs optimal), store at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Increased volume of sample facilitates the isolation of fungi and mycobacteria.

Indicate antimicrobial therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

38.0**Specimen Urethral Swab (male) – Culture for *N. gonorrhoeae*****Collection Instructions**

1. Insert urogenital swab 2-4 cm into the urethral lumen.
2. Rotate the swab, leave in place for at least 2 seconds to facilitate absorption.

Device and/or minimal volume

Submit swab in transport medium.

**Storage/Transport**

Local: Transport as soon as possible (≤ 2 hrs), store at room temperature.

Courier/local storage: ≤ 24 hrs at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Transport as soon as possible to the lab. Non-culture techniques for the detection of *N. gonorrhoeae*, i.e. molecular, are done by Cadham Provincial Laboratory, refer to Appendix I. Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

39.0 Urine**39.1****Specimen Urine – Indwelling Catheter****Collection Instructions**

1. Disinfect the catheter collection port with 70% alcohol.
2. Use a needle and syringe to aseptically collect 5-10 mL of urine.
3. Transfer sample to sterile container.

Device and/or minimal volume

Sterile, leak-proof screw capped container. Minimum volume ≥ 1 mL

**Storage/Transport**

Local: Unpreserved – ≤ 2 hrs at room temperature, ≤ 24 hrs at 4°C.
Preserved – follow manufacturer's recommendations.

Courier/local storage: Unpreserved – ≤ 24 hrs at 4°C.
Preserved – follow manufacturer's recommendations.

Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Urinary catheter tips are inappropriate for culture and will be rejected. Patients with indwelling catheters always have bacteria in their bladders. Do not collect urine from these patients unless they are symptomatic.

If indicated storage and transport cannot be followed, the urine sample may be sent in a urine transport system containing boric acid as a preservative (e.g. UriSwab®). Preserved samples can be stored at room temperature.

Indicate if patient is symptomatic or asymptomatic on ordering requisition when submitting a urine sample for bacterial culture.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

39.2**Specimen Urine – Midstream****Collection Instructions**

- A. Female
 1. While holding the labia apart, begin voiding.
 2. After several milliliters have been passed, collect a midstream portion (without stopping the flow) into a sterile transport container, or if using a UriSwab, move the UriSwab® sponge into the urine stream. Ensure that the sponge is wet.
- B. Male
 1. Retract the foreskin (if uncircumcised)
 2. Begin voiding.
 3. After several milliliters have been passed, collect a midstream portion (without stopping the flow) into a sterile transport container, or if using a UriSwab®, move the sponge into the urine stream. Ensure that the sponge is wet.

Device and/or minimal volume

Sterile, leak-proof screw capped container. Minimum volume ≥ 1 mL
UriSwab® urine transport container.

**Storage/Transport**

Local: Unpreserved – ≤ 2 hrs at room temperature, ≤ 24 hrs at 4°C.
Preserved – follow manufacturer's recommendations.

Courier/local storage: Unpreserved – ≤ 24 hrs at 4°C.
Preserved – follow manufacturer's recommendations.

Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Increased volume of sample facilitates the isolation of fungi and AFB (Mycobacteria), pooling of urine is not recommended. Sample volume of at least 40 mL is optimal for AFB (Mycobacteria) culture. A volume of ≥ 1 mL is required for fungal culture.

Urine samples for Chlamydia and *N. gonorrhoeae* are done by the Cadham Provincial Laboratory, refer to Appendix I.

Indicate antimicrobial therapy on ordering requisition.

If indicated storage and transport cannot be followed, the urine sample may be sent using a urine transport system containing boric acid as a preservative. Preserved samples can be stored at room temperature.

Indicate if patient is symptomatic or asymptomatic on ordering requisition when submitting a urine sample for bacterial culture.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

39.3**Specimen Urine – Straight Catheter****Collection Instructions**

1. Thoroughly cleanse the urethral area with soap and water or wipes.
2. Rinse the area with wet gauze pads.
3. Aseptically insert a catheter into the bladder.
4. After allowing approximately 15 mL to pass, collect urine in a sterile container.

Device and/or minimal volume

Sterile, leak-proof screw capped container. Minimum volume ≥ 1 mL

**Storage/Transport**

Local: Unpreserved – ≤ 2 hrs at room temperature, ≤ 24 hrs at 4°C.

Preserved – follow manufacturer's recommendations.

Courier/local storage: Unpreserved – ≤ 24 hrs at 4°C.

Preserved – follow manufacturer's recommendations.

Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Increased volumes are required for fungi and AFB (Mycobacteria), preferably ≥ 10 mL.

Indicate antimicrobial therapy on ordering requisition.

If indicated storage and transport cannot be followed, the urine sample may be sent using a urine transport system containing boric acid as a preservative. Preserved samples can be stored at room temperature.

Indicate if patient is symptomatic or asymptomatic on ordering requisition when submitting a urine sample for bacterial culture.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

39.4**Specimen** **Urine – *Schistosoma* spp.****Collection Instructions**

Refer to Cadham Provincial Laboratory Guide to Services

40.0**Specimen Vaginal Swab****Collection Instructions**

1. Wipe away old secretion or discharge.
2. Obtain secretions from the mucosal membrane or the vaginal vault with a sterile swab.

Device and/or minimal volume

Submit swab in transport medium.

**Storage/Transport**

Courier/local storage: ≤24 hrs, store at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Gram stain is the recommended test for bacterial vaginosis; culture is inaccurate and misleading and is not routinely performed. Vaginal swabs are assessed by Gram smear for bacterial vaginosis and yeast. If culture is required please specify reason for culture on ordering requisition. If infection with *Trichomonas vaginalis* is suspect, submit a separate swab (ideally not in transport medium) for Trichomonas antigen testing. Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

41.0**Specimen Vaginal Rectal Swab for Group B *Streptococcus*****Collection Instructions**

1. Insert the swab into the distal vagina.
2. Insert same swab into rectum through anal sphincter, gently rotate.

Device and/or minimal volume

Submit swab in transport medium.

**Storage/Transport**

Local: ≤2 hrs, store at room temperature.

Courier/local storage: ≤48 hrs (≤24 hrs optimal), store at 4°C. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

A vaginal swab alone is sub-optimal for the detection of Group B *Streptococcus* carriage.

The rectal swab should be visibly soiled.

Collect specimen at 35-37 weeks gestation.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

Clinical Microbiology Procedures Handbook. Lynne A. Garcia Ed. 2nd Edition update 2007. American Society for Microbiology, Washington DC

42.0**Specimen Vitreous Fluid****Collection Instructions**

1. Prepare eye for needle aspiration.
2. Follow protocols outlined by your health care facility for this sample type.

Device and/or minimal volume

Sterile screw capped specimen tube or direct inoculation of small amount of fluid onto bacteriologic and fungal media.

Storage/Transport

Local: ≤15 minutes at room temperature.

Courier/local storage: ≤24 hrs at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

Anesthetics may be inhibitory to some etiologic agents.

Indicate antimicrobial therapy or antifungal therapy on ordering requisition.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

Manual of Clinical Microbiology, 10th Edition. James Versalovic, Editor in Chief, 2011. American Society for Microbiology, Washington, DC

43.0**Specimen Wound****Collection Instructions**

1. Remove surface exudate by cleansing with sterile saline or 70% alcohol.
2. Sample must be acquired using aseptic technique.
3. Follow protocols outlined by your health care facility for this sample type. Sampling of surface area can introduce colonizing bacteria not involved in the infectious process.

Device and/or minimal volume

Submit swab in transport medium which will maintain anaerobe viability.

**Storage/Transport**

Local: Transport as soon as possible, hold sample at room temperature.

Courier/local storage: ≤24 hrs at room temperature. Ensure samples that are being sent to a referral laboratory are packaged in accordance with Transport of Dangerous Goods recommendations for diagnostic samples.

Rejection Criteria

Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments

If abscess is open, swab deep into the lesion and firmly sample the lesions advancing edge.

Indicate antimicrobial therapy on ordering requisition.

If requests are being made for more than one test on a swab taken from a specific site, i.e. bacterial culture aerobes, bacterial culture anaerobes and fungus culture, please ensure that a separate swab sample is submitted for each test requested. Failure to provide separate swabs will result in sub optimal microbiology culture results.

Accurate patient identification must be made prior to sample collection. Patient identification should be done in accordance with the site policy.

References

A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington, DC.

APPENDIX I

1.0 Tests Performed at Cadham Provincial Laboratory

For tests offered by Cadham Provincial Laboratory, please refer to the Cadham Provincial Laboratory Guide to Services website.

APPENDIX II**1.0 Local Transport**

Refer to appropriate specimen type in manual, Storage/Transport section.

2.0 DSM Clinical Microbiology Specimen Acceptance Transport Time Guidelines: Distant Locations

Specimens transported from distant locations should be received within 48 hours. Specimens transported and received beyond 48 hours in transit are compromised but in some instances will be processed and a disclaimer will be included in those reported as negative (as outlined in the following table).

Specimen Type	Specimen Transit time			
	≤24 Hours Ideal	>24 to ≤48 Hours Acceptable	>48 to ≤96 Hours Suboptimal*	>96 Hours Unacceptable (exceptions below)
Stool: • for culture (MUST be in enteric transport media) • for <i>Clostridium difficile</i> toxin testing (sterile container or in enteric transport media)	✓	✓	✓*	✓*
Mycobacteriology (all specimen types)	✓	✓	✓	✓
Mycology (all specimen types)	✓	✓	✓	✓
Vaginal Swab: • <i>Trichomonas antigen</i> • Bacterial vaginosis, yeast (done by microscopy)	✓	✓	✓*	✓*
Nasopharyngeal swab/aspirate for <i>Bordetella pertussis</i> PCR	✓	✓	✓*	✓*
MRSA/VRE Surveillance [if submitted to DSM lab]	✓	✓	✓*	✓*
Throat Swab for Rapid Group A <i>Streptococcus</i> Antigen	✓	✓	✓*	✓*
Urine: Dip Slide, UriSwab®	✓	✓	✓	✓*
ALL OTHER SPECIMENS	✓	✓	✓*	X

* The specimen will be processed but results may be compromised because of the prolonged transit time (a comment to this effect will be added to all negative reports).

X Specimen will not be accepted as the transport time was excessive and culture results would not be accurate and could be misleading.

✓ Specimen will be accepted and processed as per the relevant protocol.