

Handling Select Agents in the Clinical Laboratory

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Six times in recent months, the Bureau of Laboratories (BOL) has been involved in the investigation of potential exposures of clinical microbiologists in Michigan to highly pathogenic agents that are under the purview of the Select Agent Program. The details of these exposures dictates that a concerted effort must be made to bring all clinical microbiologists, microbiology supervisors, laboratory managers and laboratory professional educators to a new level of awareness of biomedical safety practices if exposures that may result in serious, potentially fatal, laboratory-acquired infections among our colleagues are to be prevented. It is clear that Laboratory Response Network (LRN) standard operating procedures for handling select agents need to be reinforced. It may be enlightening to share some of the circumstances surrounding these exposures.

In the past year, at least five clinical microbiologists in two Michigan laboratories were exposed to *Brucella* aerosols created by subculture of a positive blood culture on the bench instead of within a biological safety cabinet (BSC) as recommended.¹ After handling the plated samples for a number of days, the isolates were sent to BOL where they were recognized as likely *Brucella*, and confirmed. MDCH recommended the exposed laboratorians be put on a fever watch for six weeks, have baseline sera samples drawn and consider prophylactic antibiotics, which at least four microbiologists received.

Microbiologists in Michigan are not alone in being at risk for exposure to *Brucella*. A review of laboratory exposures to this agent, published this month, indicates 2% of all cases are laboratory-acquired.² Indeed, Brucellosis is the most frequently reported laboratory-acquired infection in the United States and worldwide, at 10.8% of all reported.³

Commercial systems are challenged by identification of small, slow growing gram-negative coccobacilli. The difficulties these systems have identifying organisms such as *Francisella* and *Brucella* may result in an isolate being handled for an extended period of time in the clinical laboratory by numerous testing personnel, delaying submission of the organism to the LRN, and thus, delaying public health investigations. In the past six months, clinical microbiologists in this state have experienced both misidentification of an isolate as *Francisella* and failure to handle a true isolate of *Francisella* correctly.

On a recent Sunday morning, MDCH was contacted by a clinical laboratory where a blood isolate had been handled for five days without the aid of a BSC or other precautions. The organism was identified by a commercial system as *Francisella tularensis*. BOL personnel picked the isolate up the same day. MDCH recommended that all microbiologists exposed initiate a fever watch and have baseline sera drawn. Within hours, *Francisella* was ruled out; the agent was confirmed as *Moraxella* spp.

Francisella tularensis was recently recovered unexpectedly from a pulmonary specimen from a patient who had no travel history associated with this illness. The patient, who was seen in two different hospitals, had three medical procedures performed by three different physicians. The isolate was handled in four different clinical laboratories, exposing more than a dozen employees in over two weeks of handling. At least one clinical microbiologist, thinking it looked like a *Haemophilus* spp, sniffed the plate culture.

Failing to identify the isolate, the final clinical microbiology laboratory handling the isolate sent it to a national reference laboratory outside of Michigan. Recognizing the likely identity of this organism, the commercial microbiology laboratory appropriately notified their state health department immediately. MDCH Bureau of Epidemiology and BOL were immediately notified in turn. As this is a select agent and a cause of concern as a bioterrorism agent, an emergency courier was dispatched to the clinical laboratory in Michigan to recover a retained isolate. Within four hours of receipt, BOL identified the isolate as a *Francisella* spp. Fever watch was initiated for the medical care workers exposed and prophylactic antibiotic were administered to two clinical microbiologists.

Recently a clinical microbiology laboratory in Michigan unexpectedly recovered *Burkholderia pseudomallei*. The agent was slow growing, as would be expected, but it was not until after five days of unprotected handling that MDCH BOL was notified. An emergency courier was dispatched to collect the organism, which was ultimately confirmed at CDC.

Most recently, a *Bacillus* spp. was sent to a commercial reference laboratory for identification rather than being forwarded to MDCH. The result? The local health department was notified by the commercial lab and began an investigation of a potential bioterrorism (BT) exposure. MDCH was notified by LHD, an entry was made in the Michigan Disease Surveillance System (MDSS), an alert was sent out on the HAN, the hospital infection control practitioner (ICP) began an investigation to identify medical care workers exposed and the patient's physician was contacted to change the antibiotic prescribed for the patient. When the isolate finally reached MDCH BOL, *Bacillus anthracis* was ruled out within six hours.

Appropriate involvement of the LRN at the first step would have saved resources and prevented administration of an additional unnecessary antibiotic.

While no active disease resulted from these exposures, failure to handle organisms appropriately in the laboratory and delays in transfer of the isolates to the LRN resulted in administration of prophylactic antibiotics and a delay in investigation of a potential BT event.

These cases underscore a fact that has finally been recognized; clinical microbiologists are the front line in defense of their communities, the linchpin that launches investigation of potential bioterrorism or an emerging disease concern. They also demonstrate who could have recognized disease activity first, but did not.

The BOL recommended that a BSC be available to every laboratory in the state that provides microbiology services, and supported this with BT grant funds. Every clinical microbiology laboratory in the state has received training in biosafety practices and the appropriate handling of *Bacillus* spp. and small, slow growing gram-negative coccobacilli. Laboratories in Michigan should have the equipment and training needed to provide a safe workplace for their clinical microbiologists. The experiences of the past months support the conclusion that there is a serious risk of exposure to highly pathogenic, easily aerosolized organisms while working with "routine cultures." How can we assure this training is translated into practice?

- Always assume that growth from sterile sites might represent highly pathogenic laboratory transmissible organisms.
- Recognize the common practices that may produce aerosols and perform them only in a BSC.
- Assume any slow-growing, small, gram-negative bacillus could be a bioterrorism agent until proven otherwise, and test according to the LRN procedures that have been provided to all microbiology labs in Michigan.
- Incorporate the steps necessary to "rule-out or refer" possible agents of bioterrorism in *routine* bench protocols for both gram-negative and gram-positive rods where indicated.

- Before sending a gram-negative or gram-positive rod to a reference laboratory for identification, be sure a possible agent of bioterrorism has been ruled-out.
- If a possible agent of bioterrorism cannot be ruled-out, notify a LRN regional laboratory instead of sending the isolate to a reference laboratory. Michigan laboratories have been provided the 24/7 contact numbers for these LRN laboratories.
- Be familiar with organisms on the select agent list.
- Be familiar with the legal requirements for the laboratory when one of the select agents is isolated:
 - Notify the Select Agent Program within 7 days. (*The Select Agent Program has indicated any exposure of lab personnel through unsafe handling practices, will be treated as a 'release', requiring full investigation and documentation.*)
 - Destroy the organism and **document** the destruction. The instructions and form for this purpose are available at: <http://www.cdc.gov/od/sap/forms/AP-HIS-CDC-Form4-f.pdf>
- Be familiar with the legal requirements for the laboratory if employees had risk of exposure to any of the select agents (MIOSHA).

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What a Waste? or Waste Not, Want Not

John Dyke, Ph.D.
Bureau of Laboratories

Recently MDCH, Bureau of Laboratories was notified by a local landfill that work had been stopped as a result of finding what appeared to be biohazard waste at the site. The landfill company requested assistance in assessing the risk and the removal of the hazard. Upon examination of the materials, they were determined to be unused MDCH specimen shipping containers that had been discarded into the domestic waste stream.

There are several issues associated with events such as this that should be prevented. First, there is a cost to the landfill operators when they shut down their operations, as well as a potential loss of good working relations with these companies. Secondly, the cost of shipping containers ranges from \$7.00 to \$20.00 each. MDCH will recycle containers, so any unused supplies should be returned. Lastly, individuals who dispose of potential medical waste inappropriately are subject to penalties under State law.

Please help by educating individuals within your facilities about the requirements for the proper disposal of medical waste. As this points out, this includes the disposal of non-hazardous waste materials that have biohazard labels or are in red autoclave bags.

Clinical microbiologists must work smarter, more safely, and with greater awareness of their pivotal role in public health. Administrators, managers, and supervisors must review practices of their staff and create an atmosphere of safety expectation. Failure to take a global approach to these issues will increase the potential for serious laboratory-acquired infections and may well delay recognition of outbreaks, natural or manmade, the outcomes of which are dangerous to our communities.

References

1. Centers for Disease Control and National Institutes of Health. *Biosafety in Microbiological and Biomedical Laboratories*, Pub no. 7-40-50-3, Washington: US Government Printing Office; 1988.

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Epidermophyton floccosum

Sandy Arduin MT(ASCP) & Bruce Palma MT(ASCP) - Mycobacteriology/Mycology Unit

Epidermophyton floccosum, is an anthropophilic (associated with humans) organism and is found worldwide. It is a dermatophyte infection that commonly causes Tinea cruris (“jock itch”) and may cause Tinea corporis (“ring worm”), and Tinea pedis (athlete’s foot). *E. floccosum* is also occasionally the cause of Onychomycosis (nail infections). Transmission occurs either thru direct or indirect contact with infected people or fomites (e.g., floors, showers, clothing).

E. floccosum typically grows slowly and is yellow, greenish-brown to khaki colored on the surface with a brown reverse. It is suede like to powdery or granular in texture. Older cultures tend to develop pleomorphism (white cottony tufts of sterile mycelium). Within three to four weeks the entire culture can degenerate into the sterile cottony form. Microscopically, club shaped, thin walled macroconidia are observed. They can be formed singly but are more commonly found in clusters. Microconidia are absent. In older cultures chlamydospores and arthroconidia may also be observed.

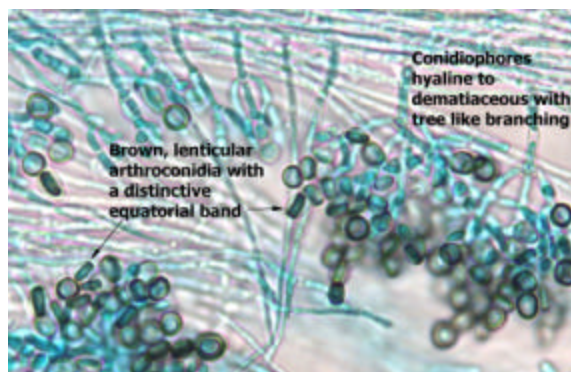


Epidermophyton floccosum

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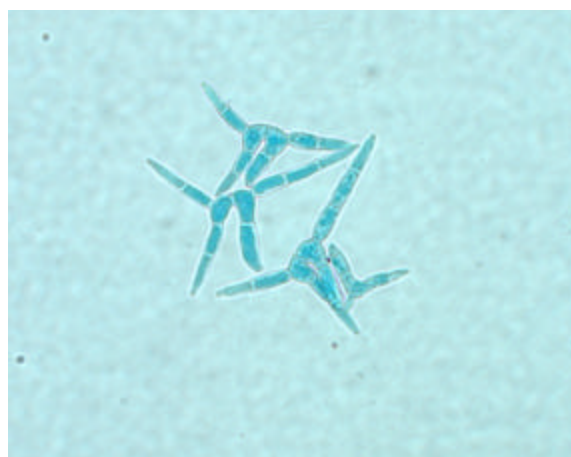
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3. Howard, Dexter. 2003. *Pathogenic Fungi in Humans and Animals*. Marcel Dekker, Inc. New York, NY.
4. www.doctorfungus.org

**Last Issue’s Picture Quiz Answer:
*Oidiodendron cerealis***



Colonies are slow growing, grayish-black to purple-black in color with a purple-black reverse. Microscopically, the conidiophores are hyaline to dematiaceous with tree like branching. Terminal branches form hyaline to brown lenticular conidia with a distinctive equatorial band. *Oidiodendron* species are commonly found in forest soils and may inhabit decaying wood. *Oidiodendron cerealis* has a worldwide distribution.

This Issue’s Picture Quiz: What Mould Is This?



HIV Testing Site Visits in Botswana

Frances Pouch Downes, Dr.P.H.
and Patty Clark, M.P.H.
Bureau of Laboratories

The country of Botswana is located in Southern Africa bordered by South Africa, Namibia, Zimbabwe and Zambia. The government is a democratic republic and has both a growing economy and a stable political environment. Botswana also has some of Africa's greatest wilderness including the Okavango Delta, the world's largest fresh water delta, and the Kalahari Desert. It is the largest exporter of gemstone diamonds in the world as well as a large beef exporter. Botswana also has one of the world's highest known rates of HIV/AIDS infection, but one of Africa's most progressive and comprehensive programs for dealing with the disease.

Two MDCH Bureau of Laboratories employees, Frances Pouch Downes and Patty Clark, recently traveled to Botswana as a part of the Association of Public Health Laboratories (APHL) Global Health Program to provide intensive quality assurance assessment and training relating to HIV EIA testing and to determine barriers to success for the Botswana national HIV surveillance study scheduled to begin in July, 2005. In a two-week period, a team of four APHL members teamed with Botswana Ministry of Health laboratory specialists to visit laboratories scheduled to participate in the national surveillance study. These 19 laboratories were located throughout the country and represented both primary and regional hospital labs. A quality assurance assessment tool developed by the Ministry of Health was used to determine the extent of implementation of the national quality systems program. All lab testing was reviewed but the assessment focused on HIV EIA testing.



MDCH's APHL team found many elements of quality assurance in place, depending on the level of awareness of laboratory staff. Proficiency testing (or as it is known locally as External Quality Assessment) is available for many tests, including HIV EIA through a Ministry of Health Program. A Botswana Laboratory Quality Manual has been written that covers essential areas of quality systems for laboratory testing. The team also made several recommendations including inventory control; distribution of testing and quality control reagents; rapid HIV testing; and equipment repair, maintenance and replacement; and technical assistance.



APHL is looking for volunteers among its membership and the broader laboratory community to serve as consultants for the Global AIDS Laboratory Project (GALP). GALP strengthens laboratory support for surveillance, diagnosis of HIV/STD/TB and opportunistic infections, HIV screening for blood safety, and disease monitoring with APHL members providing quality assurance, technical and managerial expertise. If you would like more information on becoming an APHL consultant, contact APHL at info@aphl.org.

STATEMENT ON ADOPTION OF RAPID HIV TESTING TECHNOLOGIES IN MICHIGAN

MICHIGAN DEPARTMENT OF COMMUNITY HEALTH PUBLIC HEALTH ADMINISTRATION AUGUST 2005

The Michigan Department of Community Health (MDCH), through its Division of Health, Wellness and Disease Control (DHWDC) completed an evaluation of the initial phase of implementation of rapid testing. The results of this evaluation indicate that introduction of rapid HIV testing in existing HIV counseling and testing sites operated by local health agencies and community based organizations has not resulted in a significant increase in the number of tests conducted among individuals at increased risk for HIV. Rapid HIV testing was introduced simultaneous to modifications to program targeting associated with a 2003 request for proposals. Therefore any observed increases in the number of newly identified HIV-infected persons cannot be directly attributed to introduction of rapid HIV testing. Finally, a comparative cost analysis indicates that rapid HIV testing is more costly than HIV testing conducted using either OraSure or traditional venipuncture. For these reasons, the Department does not plan to expand use of rapid HIV test technologies in community-based organizations or local public health agencies beyond those currently approved by DHWDC/MDCH to use such technology.

The Michigan Department of Community Health supports the adoption of rapid testing technologies in a manner consistent with recommendations made by the US Centers for Disease Control and Prevention and as stated in the Department's Position Statement on Rapid Testing for HIV (September 2001). In brief, the Department recommends use of rapid HIV testing in settings or situations:

- (1) Where return rates for HIV test results fall below acceptable thresholds and which have relatively high HIV seroprevalence (1% or greater) and/or which serve clients at increased risk for HIV
- (2) Where expedited medical treatment is indicated such as in the case of occupational exposure; labor and delivery settings; or in emergency rooms settings where HIV infection status is not known or documented.

Community-based organizations and local public health agencies who wish to adopt rapid HIV test technologies may do so provided that they do not use MDCH Public Health Administration (PHA) resources to support, in any way, adoption of rapid HIV testing. This includes purchase of test devices, controls, laboratory services outside the MDCH system, testing supplies and materials, personnel, insurance and other related costs. Use of MDCH –PHA resources for provision of rapid HIV testing by agencies other than those currently under contract to provide HIV counseling, testing and referral (CTR) using rapid technologies will serve as cause to terminate the contractual arrangement for provision of HIV CTR services.

Community-based organizations and local public health agencies under contract with the Department for provision of HIV CTR who elect to adopt rapid HIV testing using other sources of funding are expected to comply with all state and federal laws, regulations and requirements associated with use of rapid HIV test technologies including obtaining appropriate certification under the Clinical Laboratory Improvement Act; implementing a comprehensive quality assurance program; implementing quality control and regular competency evaluation; ensuring training and appropriate supervisory support for staff engaged in HIV testing and other requirements as specified by the manufacturer.

The Department will provide limited technical support and consultation to agencies that plan to adopt rapid HIV testing. Agencies may participate in training and certification courses sponsored by the Bureau of Laboratories and/or the Division of Health, Wellness and Disease Control, as space permits. Priority for these courses will be given to agencies under contract with DHWDC to provide HIV testing using rapid technologies. Agencies that adopt rapid HIV testing that are not under contract with the Department for provision of HIV testing using rapid test technologies may send specimens to the state laboratory for confirmatory testing provided that the agency complies with laboratory protocol for submission of specimens and agrees to report discordant and invalid test results, pursuant to protocol and procedures established by the Department.

For further information or questions, contact the Division of Health, Wellness and Disease Control at (517) 241 5900.

Michigan Scabies Prevention and Control Manual

Jennifer Beggs, MPH
Bureau of Epidemiology

The Michigan Department of Community Health Scabies Prevention and Control Manual has been completed and released. The long awaited manual provides sensible recommendations based on current best practices and scientific research, to health care agencies including but not limited to acute care, long-term care, assisted living, and homes for the aged. These recommendations are also applicable for institutions such as child and adult day-care, foster care homes, homeless shelters, schools, and prisons.

Scabies is a nuisance disease that often results in crisis, fear, and panic. This manual will help to alleviate these problems by addressing appropriate measures to prevent and control scabies. Information regarding scabies biology, clinical presentation, specimen collection, control measures, scabies medications, environment of care, education, outbreak investigation, control measure evaluation, measures for prevention, child populations, and reporting are included in the manual. Sample fact sheets, letters for notification, investigation flow charts, and case tracking forms are also provided.

Hard copies of the manual and CD-ROMS have been distributed to all Michigan local health departments. The CD-ROM has also been sent to all health care facilities. The manual can also be found on the MDCH web site. To access the manual, go to www.michigan.gov/mdch. Click on the "Inside Community Health" link found on the left side of the page. Then click on the "Health Administration" link found on the left side of page. Lastly, click on the "Communicable and Chronic Disease" link found in the middle of the page. The manual can be found in the "Spotlight" section. The manual can also be found by simply typing in "Scabies Manual" in the search field of the www.michigan.gov/mdch web page.

Thanks for the hard work in developing this manual go to the Scabies Workgroup: Jennifer Beggs, John Bezzant, Diane Cole, John Dyke, Wendy Ehnis, Sandy Ennes, Erik Foster, Paula Hoegemeyer, Candice Jeminson, Michael Kaufman, Joyce Kenyon, Larry Lawhorne, Rose

Lebbon, Brenda Matson, Ruth Anne Rye, Linda Scott, Patricia Somsel, Sue Spieldenner, Mary Grace Stobierski, James Sunstrum, Mark Szlacszy, Mari Pat Terpening, Pam VanVliet, and Edward Walker. This workgroup collectively represents the Michigan Department of Community Health, Bureaus of Laboratories, Epidemiology, and Health Systems, Michigan State University, Michigan Society for Infection Control, various health care facilities, and local health department public health nursing.

Improving the Predictive Value of the Hepatitis A IgM Assay

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The Centers for Disease Control and Prevention (CDC) and two state health departments recently completed an investigation of cases with positive hepatitis A virus (HAV) IgM (i.e., anti-HAV IgM) whose illness was not consistent with the hepatitis A case definition. This investigation was reported in a recent MMWR article (May 13, 2005; Vol. 54, No. 18, pp. 453-456) entitled "Positive Test Results for Acute Hepatitis A Virus Infection Among Persons With No Recent History of Acute Hepatitis – United States, 2002-2004." The CDC along with the Connecticut Department of Public Health and the Alaska Division of Public Health investigated a total of 294 cases and found numerous positive anti-HAV IgM results among persons who did not have illness meeting the HAV case definition. Anti-HAV IgM tests are highly sensitive and specific when used on specimens from persons with acute hepatitis. However, their use among persons without symptoms of hepatitis A can lead to false positive results or detection of past infections. Previous studies have documented the presence of anti-HAV IgM = 200 days post onset and = 30 months post onset. Therefore, the predictive value of anti-HAV IgM tests can be improved by limiting testing to persons with evidence of clinical hepatitis or who have had recent exposure to an HAV-infected individual.

The full text of this article can be found at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5418a1.htm>

Rededication of the MDCH Public Health Laboratory in Houghton

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Quality Assurance Section

On August 3, 2005 Dr. William Sottile, with MDCH Director, Janet Olszewski, and Laboratory Director, Dr. Frances Pouch Downes, christened the new laboratory facility in Houghton, Michigan. Dr. Trish Somsel, Dr. Jeff Massey, Dr. John Dyke, Susan Brownell, Jean Chabut and approximately thirty other individuals who traveled from both Lansing and the Houghton area were in attendance.



The new MDCH laboratory in Houghton, Michigan

At a brief ceremony before the christening, Dr. Downes welcomed those in attendance, Father Steven Powers gave an invocation and Kirsten White, laboratory scientist, accompanied by Mike Irish, director of Jazz Studies at MTU, entertained by singing *America the Beautiful*. Ms. Olszewski made remarks to dedicate the new facility and stressed the importance of having such a facility in the upper peninsula with both the structural and functional capabilities to serve the public and also how fortunate they were to have the highly skilled staff (Patricia Wheeler, Nancy Stoneman, Mary Brunet, Roger Skufca, Kirsten White, Robbie Bushie, David Dixon) led by Dr. Sottile present to serve them.



Director Olszewski and Dr. Sottile christen the new laboratory building

Following the breaking of the Michigan-made non-alcoholic bubbly on the structure, a brief reception was held with additional songs by Ms. White, refreshments and tours of the new laboratory facility with Biosafety Level 3 capabilities.



Dr. Downes, MDCH Laboratory Director, addresses the attendees

Infant Botulism

Robert Jacobson, BS M(ASCP)
Reference Bacteriology Unit

Infant botulism is the most frequently reported form of botulism in the U.S. It is not caused by ingestion of the preformed toxin but by colonization of the intestine by *Clostridium botulinum* spores which give rise to vegetative cells and the production *Clostridium botulinum* neurotoxin (BoNT).

Constipation, often overlooked, is the first sign of the disease. Infants who are hospitalized develop lethargy and mild weakness with feeding difficulties, pooled oral secretions, and an altered cry. Eventually the infants become floppy, lose head control and may develop ophthalmoplegia, ptosis, flaccid facial expression, dysphagia and generalized muscular weakness. Respiratory insufficiency necessitating respiratory therapy may occur as in other forms of botulism.

Infant botulism is primarily caused by botulism neurotoxin-A (BoNT-A) and botulism neurotoxin-B (BoNT-B). BoNT-A is found mostly west of the Mississippi River whereas BoNT-B is predominant east of the Mississippi. Other toxin types may be implicated but only rarely. The mean age is approximately four months with a range of less than a week to a year old. Less than 2% of infant botulism cases result in fatalities. The severity of illness ranges from mild with no hospitalization to sudden death, which accounts for a small percentage of sudden infant death syndrome (SIDS) cases.

C. botulinum is commonly found in soils and aquatic environments worldwide. There are seven toxin types A through G. Toxins A, B, C and E are the principal causes of botulism in humans. BoNT is the most lethal poison known. Honey, dust and breast-feeding are the highest risk factors for infant botulism. The CDC recommends that infants less than a year old not be fed honey.

Specimens of choice are stool and serum. Toxin is rarely found in serum and at least 2.0 mls are needed for the testing procedure. Diagnosis is confirmed in most instances by the detection of the toxin, isolation of the organism *C. botulinum* or both in stools. Ideally, 10 gms of stool should be collected. Specimens should be refrigerated after collection and during transport.

At MDCH, testing is done by the mouse bioassay using toxin neutralization testing by monovalent botulinum antitoxins. This testing may require up to two weeks to complete. A new, rapid ELISA test that can provide results in two days has been developed for BoNT. This test is also available at MDCH, however it cannot be used for serum. It is still being validated in a nationwide study and currently a positive result is only considered presumptive. *C. botulinum* can be isolated from samples by employing anaerobic techniques for growth and recovery. Culture methods are slow and can sometimes take weeks to complete.

Treatment for infant botulism is the administration of BabyBIG® (human derived Botulism Immune Globulin). BabyBIG® was developed by the California Department of Health and FDA approved in 2003. This treatment is most effective when started early in the illness and has less chance of an allergic reaction than the horse based treatment used in adult botulism cases.

Testing for *C. botulinum* will only be performed with prior approval and a consultation with the attending physician. Requests for testing may be made by contacting Dr. Jim Rudrik at 517-335-9641, Dr. Patricia Somsel at 517-335-8067 or the Bureau of Epidemiology at 517-335-8165.

References:

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Centers for Disease Control and Prevention. 1998. *Botulism in the United States 1899-1996: Handbook for Epidemiologists, Clinicians, and Laboratory Workers*. Centers for Disease Control and Prevention, Atlanta, GA.

Free Select Agent Audioconference Announced

The South Central Association for Clinical Microbiology (SCACM) invites you to register for the free audioconference, "Everything You Want to Know or Not Know about the Select Agent Rule" to be presented by Carol Whetstone, Ph.D., of the University of Louisville, Kentucky. This audioconference will be presented on Tuesday, October 18, 2005 at 1:00 until 2:00 p.m. EDT.

This audioconference is intended for microbiologists, technologists, pathologists, public health professionals, students, residents, medical directors, laboratory directors, managers, supervisors and laboratory safety professionals.

The registration is free, but is available only to a limited number of participants. Registered sites will provide the long distance telephone connection. The call will have a live question and answer session and participants can earn P.A.C.E. CEU credits. Therefore, advance registration is required by 5 p.m. CT on Friday, September 30, 2005 and only one connection permitted per site.

Your facility will need a Site Coordinator and a location with a computer with Internet connection and a speakerphone. A projector and screen are optional. To register, please complete the online form located at www.scacm.org/test/use/scall/form1.html . Two weeks prior to the call, each audioconference site will receive an email providing the audioconference bridge telephone number and access code, then you can download the files from www.scacm.org/selectagentcall/ . If you wish to submit questions for Dr. Whetstone or comments, please send them to scacm@scacm.org

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