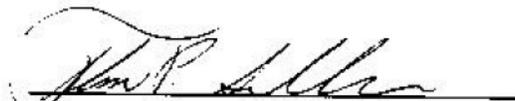


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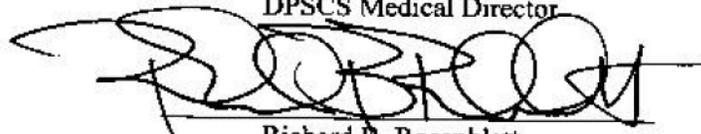


INFECTION CONTROL MANUAL

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All Policies and Procedures will be reviewed, at a minimum, annually by Office of Inmate Health Services Staff

OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 1
REPORTABLE SEXUALLY TRANSMITTED DISEASES

I. Policy:

To track and monitor sexually transmitted diseases required to be reported to the State, all inmates in the DPSCS will be educated, screened and treated for sexually transmitted diseases in accordance with the requirements of health care contracts, law, regulation, established procedures and public health guidelines. Juvenile offenders will be offered STD screening in compliance with CDC guidelines and Maryland law.

II. Procedure:

A. The Medical Contractor shall provide STD testing, education and counseling to all inmates entering the DPSCS system.

- 1.) A RPR collection shall be done at all facilities where an intake is being conducted within two hours of admission into the facility.
- 2.) Arrested women, *including juveniles*, shall be screened within seven days of admission for:
 - a. Chlamydia
 - b. Herpes
 - c. Trichomonas
 - d. Gonorrhea
 - e. Any other sexually transmitted diseases if risk factors so indicate.
- 3.) Pregnant women will be tested for every sexually transmitted disease which may cause harm to the fetus. The Medical Contract will:

- a. Medical Contractor staff shall provide educational information to inmates:
 - i. Upon testing, and
 - ii. In monthly educational forums at all facilities as scheduled on the Monthly Facilities Staffing Schedule (MFSS).
 - b. Provide documentation of these activities into the EMR or the Medical Record if EMR is not available.
 - c. The Medical Contractor shall provide to the State or Local Health Department information on inmates with reportable sexually transmitted diseases on forms required by DHMH and a copy will be placed in the individual's medical record.
- B. Juvenile as well as adult offenders will be offered the opportunity to be vaccinated for Hepatitis B.
- C. The Medical Contractor shall conduct follow-up with epidemiologic investigations for the contacts of inmates incarcerated in the DPSCS and document findings/outcomes into EMR or the Medical Record if EMR is not available.
- D. The Medical Contractor shall refer all investigated STD cases to a provider for medical evaluation and treatment.
- E. The Medical Contractor shall use DPSCS approved report Documents, and submit STD reports to the DPSCS Medical Director, CQI / Infection Disease Director, and the Maryland DPSCS STD Coordinator by the tenth day of the month following the period being reported upon. Included are monthly, quarterly, and annual reports to the DPSCS.
- F. The Medical Contract will complete and submit the following reports to the Maryland Department of health and Mental Hygiene (DHMH):
- 1.) Interview record (CDC 73.54 8-91), and
 - 2.) DHMH epidemiologic reports (Field Record CDC 73.2936s 8/91) according to establish time frames.

III. References:

- A. CDC Department of Health and Human Services,

Primary And Secondary Syphilis--United States 2003 –2004- MMWR
March 17, 2006.

- B. Syphilis Surveillance Annual Report 2004 (February 2006)
 - C. Other Sexually Transmitted Diseases 2006---The Body.
- IV. Rescissions: 130-200-220 all issuances and versions.
- V. Date Issued: July 15, 2007
- VI. Date Reviewed: July 2, 2009

OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 2
MEDICAL MANAGEMENT OF HEPATITIS

Section 1
HEPATITIS A

I. Policy

Inmates indicating signs and/or symptoms of Hepatitis A virus (HAV) infection shall undergo appropriate evaluation and treatment in accordance with current standards of medical practice.

II. Procedure:

A. Detainees presenting with any of the following should be screened for Hepatitis A (including having an IgM anti-HAV titer):

- 1.) Alcohol use and/or dependency
- 2.) Exposure to or history of Epstein-Barr (EBV), herpes simplex, Varicella-zoster, measles, rubeolla, coxsackie B or adeno- viruses
- 3.) Exposure to or history of HIV, AIDS, or Hepatitis C
- 4.) Nausea, vomiting, icterus

B. Detainees suspected of Hepatitis A should be placed in isolation and have Universal Precautions instituted.

C. Treatment for detainees found to have Hepatitis A includes:

- 1.) Medical isolation during the acute phase of the disease.
 - a. Detainees diagnosed with acute hepatitis A should be considered contagious 3 weeks before to 10 days after the onset of jaundice for containment. Detainees will be:

- i. Isolated in a single cell with separate sink and toilet (e.g. observation cell) until 10 days after the onset of jaundice and until clinically improving without diarrhea.
 - ii. Removed from any assigned duties as a food handler immediately;
 - iii. Counseled regarding the importance of strict hand washing and other practical infection control measures;
 - b. Evaluated by a health care provider daily while acutely ill for signs and symptoms of liver failure such as change in mental status, vomiting, and dehydration.
- 2.) Palliative (comfort measures) care.
- 3.) Education regarding the disease.
- D. All persons having had personal contact with detainees found to have acute hepatitis A and prophylactic serum immunoglobulin should be considered for the following:
 - 1.) Cellmate(s)
 - 2.) Sexual contacts
 - 3.) Persons routinely sharing toilet facilities
 - 4.) Very close contacts such as those who have shared eating utensils and cigarettes
 - 5.) Co-worker food handlers (if source-case was a food handler.
- E. All cases of acute hepatitis A must be reported to the Maryland Department of Health and Mental Hygiene on the appropriate infectious disease reporting form.

III. References:

- A. Mandell, Douglas and Bennett's Principles and Practice of Infectious Disease, fourth Edition, Volume I, 1995

B. Centers for Disease Control and Prevention. Positive test results for acute hepatitis A virus infection among persons with no recent history of acute hepatitis-United States, 2002-2004 MMWR. 2005

C. Centers for Diseases Control and Prevention. Hepatitis B vaccination of inmates in correctional facilities-Teas, 200-2002. MMWR. 2004

IV. Rescissions: None

V. Date Issued: July 15, 2007

VI. Date Reviewed: July 8, 2009

OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 2
MEDICAL MANAGEMENT OF HEPATITIS

Section 2
HEPATITIS B

- I. Policy: Inmates indicating signs and/or symptoms of or exposure to Hepatitis B virus (HBV) infection shall undergo appropriate evaluation and treatment in accordance with current standards of medical practice.
- II. Procedure:
 - A. Detainees presenting with any of the following should be screened for Hepatitis B including IgM anti-HBc and HBsAg.:
 - 1.) Drug and/or Alcohol use and/or dependency
 - 2.) Exposure to or history of Epstein-Barr (EBV), herpes simplex, varicella-zoster, measles, rubeolla, coxsackie B or adeno- viruses
 - 3.) Exposure to or history of HIV, AIDS, or Hepatitis C
 - 4.) Contact with any blood or body fluids
 - 5.) Nausea, vomiting, icterus
 - 6.) From high endemic countries
 - 7.) History of sexual promiscuity, STD
 - 8.) Males with history of sex with other men
 - 9.) Pregnancy
 - 10.) Tattooed or body pierced while in jail or prison
 - 11.) Abnormal liver function tests results LFT of unknown cause

- B. HBV testing will be conducted for inmates with persistently positive Hepatitis B surface Antigen for more than six months with or without elevated AST/ALT level. A full evaluation will include, at a minimum:
- 1.) Hepatitis B virus DNA quantitative PCR
 - 2.) LFT
 - 3.) Hepatitis Be Antigen and antibody
 - 4.) Hepatitis A total antibody
 - 5.) CV serology
 - 6.) HIV test
- C. The clinician will consider the following in determining a plan of care for the detainee with Hepatitis B:
- 1.) If HBV DNA PCR > 100,000
 - 2.) Copies/ml and if AST/ALT > 2x upper normal limit
 - 3.) A check of Hepatitis D antigen to rule out Hepatitis D
 - 4.) Co-infection
 - 5.) An Infectious Disease/Gastro-Intestinal consult
 - 6.) The need for a liver biopsy
- D. Pharmaceutical options for chronic Hepatitis B that will be considered by the clinician and initiated only in the presence of a written order by the clinician include:
- 1.) Lamuvidine
 - 2.) Adefovir
 - 3.) Entecavir
 - 4.) Peginterferon (Before this is ordered, a psychiatric consult should be considered)
- E. All detainees diagnosed as having Hepatitis B will be monitored. Monitoring will include:

- 1.) Clinician evaluation weekly for one month, then monthly thereafter, to assess drug regimen and possible complications
 - 2.) Psychiatry or psychology evaluations as clinically indicated during interferon treatments
 - 3.) Periodic bilirubin, prothrombin time and other liver unction studies as clinically warranted
 - 4.) Creatinine and BUN periodically (more frequently while on adefovir or tenofovir DF)
 - 5.) CBC with differential and platelet count at weeks 1, 2, and 4-8 week intervals thereafter; and
 - 6.) Thyroid function studies every 3 months during interferon therapy
- F. The following parameters will be monitored by the clinician to assess the effectiveness of antiviral therapy:
- 1.) Absence of hbeag (if hbeag-positive)
 - 2.) Absence of HBV DNA
 - 3.) Normalization of ALT
- G. NO isolation is required for patients with either acute or chronic Hepatitis B.
- H. All cases of acute hepatitis B should be reported to Maryland
- I. Department of Health and Mental Hygiene using the appropriate infectious disease reporting form.. Inmates with chronic HBV infection should be reported to the local and state authorities, as required
- J. Detainees that have been exposed to Hepatitis B, but screened as negative will receive "post-exposure management" that includes:
- 1.) Begin vaccine series immediately if inmate is unvaccinated and follow up with subsequent doses in accordance with standard practices. If the exposed inmate has already begun but has not completed the vaccine series, he should receive subsequent vaccine doses as previously scheduled

- 2.) The source of the exposure should be tested for HBsAg, even if that person was previously vaccinated
- 3.) If the source of the exposure is HBsAg-positive, hepatitis B Immunoglobulin (HBIG) 0.06 mL/kg body weight should also be administered to unvaccinated exposed inmates as soon as possible, but <7 days after the exposure.
- 4.) Inmates who have been fully vaccinated prior to an exposure to HBV may warrant a vaccine booster and/or HBIG
- 5.) In the context of a contact investigation of acute hepatitis B cases, both hepatitis B vaccination and HBIG are indicated for inmates who have had percutaneous or mucosal exposures to blood; hepatitis B vaccination alone is indicated for other close inmate contacts who have not had direct percutaneous or mucosal exposures.

III. References

- A. Mandell, Douglas and Bennett's Principles and Practice of Infectious Disease, fourth Edition, Volume I, 1995
- B. Centers for Diseases Control and Prevention. Hepatitis B vaccination of inmates in correctional facilities-Teas, 200-2002. MMWR. 2004
- C. Federal Bureau of Prisons, Clinical Practice Guidelines for the Prevention and Treatment of Viral Hepatitis, October, 2005

- IV. Rescissions: None
- V. Date Issued: July 15, 2007
- VI. Date Reviewed: September 23, 2009

OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 2
MEDICAL MANAGEMENT OF HEPATITIS

Section 3
HEPATITIS C

I. Policy:

Inmates who have been diagnosed with Hepatitis C virus (HCV) infection, shall undergo appropriate evaluation and treatment in accordance with current standards of medical practice. HCV infected inmates will be enrolled in chronic care clinics for education, medical evaluation and treatment.

II. Procedure:

- A. HCV testing will be conducted where clinically indicated or in the presence of risk factors with or without elevated LFT including, but not limited to:
- 1.) HIV infection or chronic HBV infection.
 - 2.) Signs or symptoms of acute or chronic hepatitis including elevated enzymes or jaundice.
 - 3.) Percutaneous exposures to blood.
 - 4.) Chronic hemodialysis which requires the clinician to screen ALT levels monthly and anti-HCV by immunoassay semi-annually.
 - 5.) Risk factors as defined by CDC.
- B. Pre-test counseling will occur so that inmates are provided with basic information regarding transmission, diagnosis and screening measures for HCV. During the counseling session, a Pre-test counseling form will be presented to the inmate for signature to indicate his understanding to testing. This will be documented on the HCV Evaluation Work Sheet.
- C. An HCV Evaluation Worksheet will be initiated by the nurse and/or clinician if Hepatitis C is suspected. A Hepatitis screening panel will be

drawn and sent to the lab for analysis unless record review demonstrates previous/recent testing.

- D. Post-test counseling will be conducted, and documented, for all inmates who underwent HCV testing and will consist of:
- 1.) Delivery of HCV basic information,
 - 2.) HCV lab results with basic interpretation of results, and
 - 3.) Possible options for further treatment with review of exclusionary criteria for antiviral treatment (for the inmates who are found HCV positive) .
 - 4.) Based upon the lab tests results (HCV positive vs. HCV negative) a Post-test counseling form will be presented to the inmate for signature to indicate his/her understanding of the process. This will be documented on the HCV Evaluation Work Sheet of the inmates who are tested HCV positive.
- E. A continued work up of detainees found to have Hepatitis C (HCV antibody positive) includes:
- 1.) He/she will be enrolled in a Hepatitis Chronic Care clinic and is expected to be seen by a physician every 3 months. (Non-compliant cases that are mono-infected may be seen as infrequently as once a year; however this should not be encouraged and is not advisable. Such infrequent visits must be on the order of the clinician and requires documentation regarding the reason for the infrequency). Clinician will document return time frames for follow up visits in the progress notes.
 - a. The clinician will add the diagnosis to the Problem List in the medical record/EMR and will initiate a written Plan of Care (Treatment Plan).
 - b. At first chronic care visit, the clinician will document on the progress notes the antibody test results and provide further education about the management of HCV disease.
 - c. The inmate will be given additional "Hepatitis C Virus: Fact Sheets/Education sheets," This will be documented on the HCV Evaluation Work Sheet

- d. Screening for HIV status will be completed if the HIV Status is unknown. This will be documented on the HCV Evaluation Work Sheet, in EMR and the Problem List.
- 2.) During the first visit to Chronic Care Clinic which should be within 30 days of receipt of positive HCV test, detainee will start receiving vaccinations for Hepatitis A and B using a combination vaccine as appropriate. This will be documented on the Evaluation Work Sheet.
- a. Consent for immunization must be obtained and filed in the medical record.
 - b. The remainder hepatitis A and B immunizations will be completed during the inmate's visit to the hepatitis chronic care clinic visits per prescribed schedule.
 - i. Documentation of the administration of the vaccination shall be completed on the DPSCS immunization record.
 - ii. The DPSCS immunization record shall be maintained in the patient's medical record and documented in the EMR.
 - c. An alternative accelerated schedule may be used when the clinician feels it is medically appropriate and documents the need for the accelerated schedule.
 - i. Only a recognized manufactured combination Hepatitis A and Hepatitis B may be used.
 - ii. The combined vaccine should be administered by intramuscular injection. It is never to be administered intradermally or intravenously.
 - iii. The combined injection should be given in the deltoid region and NOT in the gluteal region.
 - iv. Primary immunization for adults consists of three (3) doses, given on a 0, 1 and 6 month schedule.
 - v. The alternative dosing is a four (4) dose schedule given on days 0, 7, and 21 to 30, followed by a booster at month 12.

- 3.) At first chronic care clinic and prior to additional testing, if the inmate has any of the following conditions, then he/she will not be eligible for antiviral therapy but will be enrolled in chronic care clinic for monitoring.
 - a. Age <18, or age >60 years.
 - b. Life expectancy less than 10 years.
 - c. Remaining incarceration time <24 months for genotype 1 and HIV/HCV co-infected inmates and <12 months for genotypes 2 and 3 (provide release date)
 - d. History of solid organ transplant.
 - e. Known/documented history of autoimmune disease.
 - f. Known/documented compliance rate with any chronic care conditions/visits, and/or medication adherence <80%. (eg. Poor HgA1c, TLTBI RX, etc.)
 - g. Known/documented alcohol and/or illicit drug use within previous 12 months. (Check OMSR)
 - h. Pregnancy
 - i. AIDS (CD4 <200, VL >50,000 copies)
 - j. Decompensated liver disease
 - k. Decompensated mental health condition and non compliant with mental health medications/care plan.
 - l. Active, or history of, an Axis I, II, or III Psychiatric Diagnosis unless specifically approved by both Medicine and Psychiatry.
- 4.) If inmate does not have any of the above exclusionary criteria above then he/she will undergo additional testing.
- 5.) Detainees who are eligible for antiviral therapy will be provided with education regarding the HCV medical workup and the possibility that antiviral therapy may be needed. Detainee will sign the HCV Informed Consent Sheet to continue the workup. If the detainee agrees, the clinician will:

- a. Obtain the following lab tests:
 - i. Comprehensive chemistry to include at a minimum: albumin, bilirubin, CBC, creatinine, ALT, TSH, (HIV test with pre/post test counseling per AIDS Administration guidelines), PT-INR, AFP, ANA, Ferritin
 - ii. If female, pregnancy test,
 - iii. If known diabetic, Hg a1c.
 - iv. Draw an HCV Viral Load and Genotype to determine chronic infection (vs. Clearance of the virus) and the type of the Hepatitis C virus.
 - b. Document the lab results on the HCV Initial Lab Flow Sheet.
- 6.) If detainee is found to have HCV present on viral load analysis, then general screening for antiviral treatment will occur. Documentation of baseline HCV VL and genotype will be placed on the HCV Initial Labs Flow Sheet, and clinician will write an order to place the inmate on Medical Hold using the appropriate form (DPSCS Form 130-100ir).
- a. Clinician will obtain a mental health consultation for documentation and confirmation of an active, or history of, an Axis I or Axis II diagnosis and submit a Psychiatry Referral Form to the institutional psychiatrist for confirmation of an active, or history of, an Axis I or Axis II diagnosis.
 - b. Regional Infection Control Coordinator/designee will be responsible for the submission of a copy of the completed psychiatry referral form to be included with the Hepatitis C Treatment Request packet to the DPSCS Medical Director's office with a copy to the Statewide Mental Health Director.
- F. Upon receipt of the HCV genotype results, *within 14 days* the clinician will meet with the inmate and discuss/formulate HCV treatment plans that will include:
- 1.) An evaluation of laboratory results.
 - 2.) Consultation Request for GI or ID specialist for all inmates being considered for liver biopsy or antiviral therapy should be requested

within 30 days of treatment plan discussion post receipt of genotype

- 3.) Liver biopsy:
 - a. Inmates with genotype 2 or 3 will not be required to have a liver biopsy to be considered for HCV antiviral therapy.
 - b. HIV/HCV co-infected inmates will not be required to have liver biopsy prior to consideration of antiviral therapy. This exception can be waived at the request of the inmate.
 - c. All other categories will undergo liver biopsy unless the ID/GI specialist recommends for other clinical reasons an alternative assessment tool like fibrosure.
- 4.) Inmates' candidacy for antiviral HCV therapy. The medical record, complete with all information recorded as stated shall be assembled and prepared by the Regional Infection Control Coordinator and the Statewide/ Regional Medical Director or designee and forwarded to the DPSCS HCV coordinator prior to presentation to the HCV panel.
- 5.) The inmate shall be placed on a "medical hold."

G. If liver biopsy is a consideration prior to treatment , the clinician will present the case at the next scheduled DPSCS clinical panel telemedicine meeting to obtain approval for liver biopsy prior to a request being sent to Utilization Management for approval and authorization, and:

- 1.) The presentation to the panel for liver biopsy must be done as outlined in the "Biopsy Request Process" form
- 2.) Once the clinical panel approves a liver biopsy, the medical provider will present the case to Utilization Management *within five days* of the panel approval determination.
- 3.) *Once approved, the liver biopsy will be scheduled and performed within 6 weeks of the UM approval date.* If not, the reason for delay will be documented in EMR and panel will be notified. Clinicians will follow the process as stated:
 - a. If the liver biopsy is normal or indicates minimal fibrosis – monitor and re-biopsy in three (3) years.

- b. If the liver biopsy shows portal or bridging fibrosis and moderate inflammation and necrosis - consider antiviral therapy and monitoring in Chronic Care Clinic.
 - c. If the liver biopsy shows decompensated hepatic disease, the inmate will not be a candidate for antiviral therapy and detainee will be followed in Chronic Care Clinic with counseling regarding options including consideration for medical related parole.
 - d. If the inmate refuses the liver biopsy, there will be no further need to proceed with antiviral therapy consideration. Clinician will:
 - i. Document counseling related to the refusal of the procedure and subsequent continued viremia and continue to see the inmate in the Chronic Care Clinic every 3 months.
 - ii. Document refusal for biopsy in the Release of Responsibility form, the EMR as well as in the Infectious Disease database, and
 - iii. Forward a copy of the declination of treatment to DPSCS/HQ Infection Control office.
- H. If detainee is proposed for ANTIVIRAL THERAPY, the clinician will update the comprehensive medical case summary and contact the Regional Infection Control Coordinator/designee for assembly of supplemental casework.
- 1.) The Regional Infection Control Coordinator will assemble and review the Hepatitis C Treatment request packet for presentation at the next clinical panel review which will include:
- a. A comprehensive medical case summary
 - b. A complete copy of all supporting documentation as listed on the checklist sheet
 - c. A copy of the signed consent
 - d. Any refusal for treatment

- e. Document any delays in testing reports or procedures that created any default in the time periods to be met under the protocol.
 - 2.) The Site Medical Director or the site ID staff will document on the HCV Evaluation Work Sheet the date reviewed, his/her signature and forward the HCV request for antiviral therapy to the Regional Medical Director for treatment recommendation.
 - 3.) The Regional Medical Director/designee will present the “post liver biopsy” cases to the DPSCS Clinical Panel within a period of time which should not exceed 15 days from the time the liver Biopsy report is received.
 - I. The DPSCS Clinical Panel will:
 - 1.) Review submitted documentation for completeness.
 - 2.) Review GI/ID opinion and Histology report.
 - 3.) Communicate one of the following determinations:
 - a. Pending: more information needed,
 - b. Approved: Initiate treatment on site following recommendations of specialist consultant,
 - c. Referred to GI or ID Specialist for concerns/further evaluation/treatment. Consultation presentation to the UM contractor for off site specialists should occur within 5 working days of the panel recommendations.
 - d. Denied: secondary to inappropriateness for antiviral treatment, continue to monitor in Chronic Care Clinic
 - J. Following panel determination,-DPSCS Hepatitis C coordinator will inform Utilization and Pharmacy services within 48 hrs via e-mail.
 - K. If antiviral drug therapy is to be initiated, the clinician will write medical orders and send to the Pharmacy vendor within 72 hrs.
 - 1.) A copy of the order will be sent to DPSCS Hepatitis C nurse.
 - 2.) A copy of the MAR indicating when therapy starts (first month only) will be sent to DPSCS Hepatitis C nurse.

- 3.) Any refusal for HCV therapy will be documented in the medical record/ EMR of the inmate
- 4.) All refusals for HCV treatment must be presented to the HCV panel for tracking and risk management.
- 5.) Inmate will be required to sign a “Release of Responsibility” form indicating that she/he has refused therapy.
- 6.) A copy of the “Release of Responsibility” form will be sent to the DPSCS Hepatitis Coordinator and the pharmacy vendor.

L. Community Initiated HCV therapy continuation:

During the intake process, any inmates identified to be on HCV antiviral therapy will be referred immediately to the Medical Provider to assure continuity of treatment. The Medical Provider or designee will:

- 1.) immediately obtain medical records from the community provider to verify the patient’s treatment modality via release of information form signed by the inmate.
- 2.) document date of request for medical record in the patient’s medical record/EMR.
- 3.) notify the Regional medical director and OIHS HCV Nurse /Medical director via e-mail with data regarding approval for continuation of community treatment medications for HCV disease including:
 - a. inmate’s name
 - b. inmate’s DOC number
 - c. community provider
 - d. genotype
 - e. Medications being used for HCV therapy continuation.
- 4.) document OIHS permission to continue antiviral therapy.
- 5.) complete a non formulary request to obtain a “bridge” order approval from the Regional Medical Director to continue HCV medications for 30 days.
- 6.) present the case to HCV panel the next HCV panel meeting date.

7.) following the panel's determination, DPSCS Hepatitis C coordinator will inform Utilization Management and the Pharmacy services within 48 hrs via e-mail:

- a. inmate's name
- b. inmate's DOC number
- c. community provider
- d. genotype
- e. Medications being used for HCV therapy continuation

M. Liver transplant considerations: Any HCV positive inmate who has been identified as a potential candidate for liver transplant or enters our system already on a liver transplant listing will be presented to the panel for evaluation and recommendations. DPSCS does not make the determination of candidacy for transplantation eligibility; however, the panel may recommend the following:

- 1.) Referral of inmate to UMMS transplant panel for further recommendations.
- 2.) On a case by case basis, consideration for parole as well as transport to a security based facility with 24 hour infirmary services will be made. The inmate will be placed on medical hold.

N. Palliative Care/Hospice

A living will shall be facilitated by medical/mental health. In the event a liver donor is not found or transplant is not an option and parole is denied, the inmate shall be counseled regarding options, living will, hospice care, etc...

- 1.) A designated relative or friend will be identified and assigned limited power of attorney to facilitate options in a living will with assistance from pastoral services.
- 2.) A copy of the living will shall be given to the inmate and placed in hard copy medical records and noted in EMR.

O. HBV/HCV co-infection:

Therapy is also provided to inmates who are HCV/HBV co-infected and these cases must be presented to the Hepatitis Panel for recommendations of treatment.

III. References:

- A. Mandell, Douglas and Bennett's Principles and Practice of Infectious Disease, fourth Edition, Volume I, 1995
- B. Federal Bureau of Prisons, Clinical Practice Guidelines for the Prevention and Treatment of Viral Hepatitis, October, 2005.
- C. Sulkowski MS, Thomas DL. Hepatitis C in the HIV-infected person. Ann Intern Med 2003; 138:197-207.
- D. Alvess C, Yee H et al. Practice guide, Management and Treatment of Hepatitis C Viral Infection: Recommendation From the Department of Veterans Affairs Hepatitis C Resource Center Program and the National Hepatitis C Program Office.
- E. Gastroentrology 2006; 101; 2360-2378
- F. Stradler D.B., Wright T et al. AASLD Practice Guidelines, Diagnosis, Management and Treatment of Hepatitis C. Hepatology 2004; 39; 1147-1171

IV. Rescissions: None

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OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 2
MEDICAL MANAGEMENT OF HEPATITIS

Section 4
HEPATITIS C ANTI-VIRAL THERAPY

I. Policy:

Inmates who have been diagnosed with Hepatitis C virus (HCV) Infection and determined to be appropriate candidates for anti-viral therapy shall undergo treatment in accordance with current standards of medical practice.

II. Procedure:

A. Treatment recommendations are based on HCV genotype and include:

- 1.) HCV genotype 2 or 3 (mono-infected inmates).
 - a. Treat with pegylated interferon/ribavirin combination 24 weeks therapy
 - b. Recheck HCV viral load (HCV RNA, quantitative) at 12 weeks (EVR), at completion of the *24 weeks therapy and 6 months after completion of effective therapy*.
- 2.) HCV genotype 2 or 3 (inmates co-infected with HIV).
 - a. Treat with pegylated interferon/ribavirin 48 weeks therapy
 - b. Recheck HCV viral load (HCV RNA, quantitative) at 12 weeks, at completion of therapy and 6 months after completion of effective therapy.
 - i. If viral load has not decreased by two (2) logs (10^2) at

12 weeks discontinue therapy. Patient must sign waiver for discontinuation of therapy and the case will be presented to the panel within 10 working days. Also document in both EMR/medical record and Infectious Disease database.

- ii. If viral load has decreased by two (2) logs (10^2) at 12 weeks, continue the 48 weeks therapy
- iii. Submit copy of the above documentation to the DPSCS Hepatitis C Nurse.

3.) HCV genotype 1:

- a. Treat with pegylated interferon/ribavirin *48 weeks* therapy.
- b. Recheck HCV viral load (HCV RNA, quantitative) *at 12 weeks*.
 - i. If viral load has not decreased by two (2) logs (10^2) at 12 weeks, discontinue therapy. Patient must sign waiver for discontinuation of therapy.
 - ii. If viral load has decreased by two (2) logs (10^2) at 12 weeks, continue the 48 weeks therapy. Recheck HCV viral load (HCV RNA, quantitative) at completion of treatment and 6 months after completion of effective therapy.
 - iii. Submit copy of the above documentation to the DPSCS Hepatitis C Clinical Panel within 10 working days. Also, document in both EMR medical record and Infectious disease database.
- c. For all genotypes, if ribavirin is contraindicated treat with pegylated interferon for the duration of the treatment regimen.

B. Clinician will monitor all anti-viral therapy recipients and will:

- 1.) Repeat ALT every two (2) months for six (6) months after completion of effective therapy.

- 2.) Measure HCV viral load (HCV RNA, quantitative) six (6) months after completion of effective therapy. In determining treatment response, use quantitative HCV, RNA, quantitative with lower limit cut off 50 IU/ml.
- 3.) Refer to drug education/treatment program if appropriate.
- 4.) Assure that all HIV/HCV co-infected persons receiving anti-viral therapy will have laboratory studies based on 2007 Federal guidelines for patients receiving HAART as follows:

Test	Baseline	Repeat
CD4 count	x	Every 3 months
HIV RNA	x	2-8 wks after starting ART, then every 3 months.
Resistance test Genotype	x	Virologic failure – within 4 wks
Chemistry profile	x	Every 3 months
Liver function	x	Every 3 months
CBC	x	Every 3 months
Fasting lipids and glucose	x	Every 12 months, at 3 months after starting ART and every 3-6 months if abnormal
Urinalysis	x	Every 3 months if receiving TDF

- C. In the event of complications of Antiviral therapy, the clinician shall notify the regional medical director and hold therapy pending consultation with an ID consultant/DPSCS hepatitis C panel. Additionally the Regional Medical Director
- 1.) Will notify DPSCS Medical Director/Hepatitis C nurse designee of the inmate's condition,
 - 2.) Document that therapy was stopped.
 - 3.) May also present the case to the Clinical Panel for new recommendations within the next panel session.
 - 4.) Will follow emergency procedures for urgent or life threatening complications related to antiviral therapy if immediate stabilization is not achieved.
- D. For inter-regional transfers of patients on HCV antiviral therapy, the sending Regional Medical Director/designee shall immediately notify the receiving Regional Medical Director/designee and will:
- 1.) Provide patients status report of same.

- 2.) Notify the DPSCS Medical Director/hepatitis C nurse designee by e-mail of this transfer.
 - 3.) Notify the receiving Infection Control Coordinator of any inter-regional transfers of patients on HCV Antiviral Therapy and provide patients status report of same.
 - 4.) Document that all persons have been notified and reports delivered to the appropriate persons.
- E. The Medical Service Provider's Statewide Infection Control Coordinator will submit monthly status reports to the DPSCS Quality Improvement Director electronically (which should also be documented in the infectious disease database). Reports will have at a minimum, inmate names, DOC numbers, dates of birth, and facility. Reports will be broken out by site and will include numbers of inmates:
- 1.) Who are known to be infected with HCV
 - 2.) Co-infected with HCV/HIV;
 - 3.) Who received genotype testing;
 - 4.) Who received GI or ID specialty consultation for evaluation for liver biopsy;
 - 5.) Who received liver biopsy;
 - 6.) Who received GI or ID specialty consultation for evaluation for antiviral therapy;
 - 7.) Recommended for antiviral therapy;
 - 8.) Per facility receiving Interferon/ribavirin therapy;
 - 9.) Receiving pegylated interferon alone, due to contraindication for ribavirin therapy;
 - 10.) Completing each week of the above procedure during the month including:
 - a. The number of inmates who have completed Week 1 – Week 48.
 - b. The number of inmates who have completed therapy.

- c. The number of inmates who have discontinued antiviral therapy with reason.
- F. The Pharmacy Vendor will also submit to the Quality Improvement Director /hepatitis C nurse monthly reports with documentation of those receiving anti-viral medication for HCV including:
 - 1) Name of inmates
 - 2) DOC number
 - 3) Facility
 - 4) Medications ordered.
 - 5) Quantity of Medications
 - 6) Start date of treatment
 - 7) Stop date of treatment

III. References:

- A. Mandell, Douglas and Bennett's Principles and Practice of Infectious Disease, fourth Edition, Volume I, 1995
- B. Federal Bureau of Prisons, Clinical Practice Guidelines for the Prevention and Treatment of Viral Hepatitis, October, 2005.
- C. Sulkowski MS, Thomas DL. Hepatitis C in the HIV-infected person. Ann Intern Med 2003; 138:197-207.
- D. Alvess C, Yee H et al. Practice guide, Management and Treatment of Hepatitis C viral Infection: Recommendation From the Department of Veterans Affairs Hepatitis C Resource Center Program and the National Hepatitis C Program Office.
- E. Gastroenterology 2006; 101; 2360-2378
- F. Stradler D.B., Wright T et al. AASLD Practice Guidelines, Diagnosis, Management and Treatment of Hepatitis C. Hepatology 2004; 39; 1147-1171

- IV. Rescissions: None

V. Date Issued: April 2007

VI. Date Reviewed September 22, 2009

Attachment A

HCV INFORMED CONSENT SHEET

I have been informed that I am infected with the Hepatitis C virus and due to this I am formally requesting treatment to be initiated by the medical staff in the medical unit. The physician has fully advised me regarding the Hepatitis C Virus natural history, its effects on my health, and the steps I can take in order to decrease the impact of the disease on my health. Illegal drugs and alcohol are toxic to the liver and must be avoided irrespective of my decision to take medication treatment for the virus. It is possible to contract more than one genotype of the virus through this high risk behavior. My physician or Infection Control Nurse will explain genotype to me to help me understand the progression of my disease. I understand that evidence of drugs and/or alcohol in my system can cause me to be removed from treatment.

Furthermore, I have been advised by the physician that treatment, (which most often involves two medications, one injected and the other by mouth) may not be effective in treating my Hepatitis C virus infection. These medications might even make my liver worse, and they would have to be stopped. The overall chance of successful treatment can vary based upon the type of HCV virus I have contracted. Roughly 50% of people with the disease are able to successfully remove the virus from their system. This is measured by blood tests taken 12 weeks after the start of therapy. If the virus does not respond to the therapy at this point a decision will be made regarding continuation of HCV virus medication or the need for non medication based alternative care. I further understand that compliance with the therapy regimen (taking the medication as ordered) is vital to the success of the therapy.

By signing this consent, I understand that I am committing to treatment that will last for either twenty four (24) or forty eight (48) weeks depending upon my genotype and an additional 12 weeks of monitoring after medication completion to determine if the virus has been completely removed. This completion date is non negotiable and inmates who are unable to meet this criteria will not be eligible for initiation of antiviral therapy.

I understand that there are numerous and potentially life threatening side effects that may occur during and after medication therapy:

Side effects may include "flu" like illness including muscle aches and loss of appetite; potential mental problems, like depression, irritability, uncontrollable anger, and other problems. The medication can also cause gastrointestinal upset or bleeding, heart problems, kidney problems, lung problems, and/or anemia (low blood counts). The medication also can cause an increased potential to get other infections, and there have been cases where any infection may be deadly. Sleep disturbances and hair loss are also common side effects.

These or other side effects of the medication may occur so I will let the medical staff know if or when problems occur. In the event a side effect of the medication does occur, treatment will be altered accordingly. I agree to be compliant with appointments and medications prescribed through out the treatment. Fetal damage related to taking these types of medications may last up to 6 months after taking the last dose of these medications for HCV. By signing this form, I pledge to use contraception methods combining at least two options such as condoms, birth control pills, diaphragms etc. if I am prematurely released from custody while on treatment for any reason.

I will be monitored with routine laboratory studies and clinic visits throughout my therapy. Regardless of the treatment outcome, I am fully aware that maintaining my overall health offers the best opportunity to long term survival with the Hepatitis C virus. By signing this document, I acknowledge that I have read the above information, an opportunity to ask questions about my proposed evaluation and potential treatment and that it has been explained to me by a health care provider.

Patient's Signature	Date Signed:
Provider's Signature	Date Signed:

INITIATION OF CHRONIC CARE CLINIC INTERVENTION/PATIENT EDUCATION (FORM HCV3, APPENDIX) PROVIDED TO PATIENT

Patient's Signature	Date Signed
Provider's Signature	Date Signed:

I consent to medication treatment to include an interferon product and Ribavirin. I understand that I may withdraw or cancel this consent in writing at anytime.

Patient's Signature	Date Signed:
Provider's Signature	Date Signed:

OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 3
HUMAN IMMUNOSUPPRESSANT VIRUS (HIV)

Section 1
INITIAL ASSESSMENT

I. Policy:

All HIV infected or potentially infected inmates within the Maryland Department of Public Safety and Correctional Services (DPSCS) shall receive periodic medical evaluations, preventative care, and treatment, in accordance with current standards of medical practice.

II. Procedure:

A. Inmates who test positive for HIV infection by EIA and confirmed by Western Blot analysis should be referred to a physician for baseline evaluation within 14 days, unless more expedient medical evaluation is clinically indicated. Western Blots shall be interpreted as positive in accordance with Centers for Disease Control criteria.

B. Indeterminate test results will be interpreted and managed according to current standard of care for HIV-1 infection and it is associated with the following conditions:

1. Process of HIV seroconversion
2. HIV-2 infection (West African, travel to West Africa, or high risk contact with West African)
3. History of blood or blood product transfusions
4. Organ transplantation
5. Pregnancy
6. Autoimmune disease
7. Malignancy

8. Recipients of HIV experimental vaccines
 9. Late Stage of HIV Infection
- C. Indeterminate results include a positive EIA and usually a single p24 band on Western Blot analysis. Inmates with indeterminate HIV test results should be referred to a physician for further evaluation in including:
1. Physician interview for HIV infection risk factors, symptoms of HIV infection and AIDS, and causes of indeterminate HIV test results.
 2. Physician evaluation of the inmate for conditions that may result in an indeterminate test result when clinically indicated based on the inmate's history and examination.
 3. Repeat HIV testing in three or six months. If the clinician suspects acute seroconversion, then an HIV-B-DNA (qualitative) should be drawn. If acute seroconversion is suspected, the clinician should label the laboratory requisition as suspect for acute seroconversion.
 4. If HIV test result remains indeterminate at six months with a single p24 band and the inmate has no clinical evidence of HIV infection, physician should consider the inmate uninfected (by three months, most persons in the process of seroconverting their indeterminate result should have a positive Western Blot). No additional HIV testing is indicated for screening purposes.
- D. Inmates who are confirmed to be HIV positive by ELISA and Western Blot analyses shall receive an initial comprehensive examination by a licensed physician. This examination shall be performed within fourteen (14) days of diagnosis. Physical examination includes (but is not limited to):
1. Medical history including assessment of HIV risk factors
 2. Physical examination including pelvic examination and PAP smear for women (PAP Smear should be performed at baseline, 6 months, and annually, unless CD4 is under 200, then Q6 months indefinitely)
 3. Referral for dental examination by a dentist for all inmates
 4. Psychology referral if clinically indicated.
 5. Baseline laboratory studies including (but not limited to):
 - a. CBC/platelet count

- b. CD4+T-lymphocyte count and percentage (DO NOT ORDER COMPLETE T-cell subset analysis)
 - c. Viral load assay.
 - d. LFT's, creatinine, BUN, blood sugar, CMD, amylase, and a fasting lipid profile (including triglycerides).
 - e. RPR/FTA-treatment history review-repeat test if chart documented RPR is over one year's time.
 - f. Serum Toxoplasmosis titer, IgG
 - g. Hepatitis serologies to include:
 - i. Hepatitis A antibody, total
 - ii Hepatitis B surface antigen and surface antibody
 - iii. Hepatitis C antibody
 - iv. PPD/symptom review
 - h. Chest x-ray; baseline (If currently in chart, no need to repeat under 6 months)
6. Assessment and administration of:
- a. Pneumococcal vaccine (0.5ml. IM x1) for inmates with CD+4 (T-Cells > 200/mm³ (Booster at 5 years)
 - b. Influenza vaccine: (0.5ml. IM in deltoid muscle) annually prior to influenza season for inmates with CD4+ T-cell counts >200/mm³
 - c. Hepatitis A vaccine: Patients with Hepatitis C infection (85% of HIV +), Booster at 6 months.
 - d. Hepatitis B vaccine: Patients with Hepatitis C infection and HIV infection should receive Hepatitis B vaccine series. (series of 3).

- E. Comprehensive treatment plan, including sub-specialty referrals as clinically indicated will be developed and documented in the patients records/EMR. Consultation with ID specialists will take place within 30 days via telemedicine or on-site. Telemedicine consultation with ID specialists will be conducted weekly.
- F. CDC Classification of HIV infection.
- G. The examining physician will notify the regional infection control nurse that an inmate with HIV infection has been medically evaluated and will provide the following documentation which will have already been recorded in the medical record.
 - 1. Initial Reporting Form for HIV Infection within five (5) working days.
 - 2. Maryland DPSCS HIV Chronic Care Flowsheet, placed in the medical record.
 - 3. Chronic care clinic progress note in the medical record/EMR.
 - 4. CDC/AIDS Administration Questionnaire form.
 - 5. Copy of ID specialist reports (telemedicine or on-site)
- H. The regional infection control nurse, or designee, will review the medical record, and within five (5) working days of the physician's notification will:
 - 1. Enter the appropriate information into the DPSCS infectious disease database.
 - 2. Provide monthly report of newly diagnosed inmates to the regional social work supervisor for case management, intervention, and release planning.
- I. Medical evaluations for HIV positive inmates should be conducted by a clinician at least once every 3 months. Immunologic status should be assessed by the measurement of the CD4+ T-cell count and the HIV viral load in accordance with current CDC guidelines. CDC classification should be updated with any changes in classification during periodic clinical evaluations. The indications and frequency of other laboratory monitoring will depend on the inmate's antiretroviral treatment regimen and prophylactic regimen for opportunistic infections.

- J. The HIV viral load should not be measured within one month of an acute illness or immunization due to possibility of inaccurate results. Viral load should be measured periodically, before and within 4-6 weeks after changes in anti-retroviral treatment are initiated. Treatment decisions should not be made on viral load test results when inmates have been noncompliant with a treatment regimen.

III. References:

- A. 2006 edition, Medical Management of HIV Infection, John G. Bartlett, M.D., Professor of Medicine, Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, Maryland, MD.
 - B. DHHS – Guidelines for the Use of Antiviral Agents in HIV Infected Adults and Adolescents, March 24, 2009 (updated).
 - C. HIV Primary Care Practice Guideline to the Management of Persons infected with HIV; Recommendation of the HIV Medicine Association of IDSA (Sept 2004) Judith Aburg, Joe E. Gallant:
 - D. DPSCSD 130-300: Pharmacy Services Manual, Section: Medication Administration
 - E. DPSCSD 130-100, Section: Continuity of Care
 - F. DPSCSD 130-200: Medical Management of Tuberculosis
 - G. Public Health Service Task Accommodations for the Use of Antiretroviral Drugs in HIV.
- IV. Rescissions: DPSCS 130-200 SURVEILLANCE AND TREATMENT; STAGING AND MEDICAL MANAGEMENT OF HIV INFECTION
- V. Date Issued: July 15, 2007
- VI. Date Reviewed July 2, 2009

OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 3
HUMAN IMMUNOSUPPRESSANT VIRUS (HIV)

Section 2
ONGOING DISEASE MANAGEMENT

I. Policy:

All HIV infected inmates within the Maryland Department of Public Safety and Correctional Services (DPSCS) shall receive periodic medical evaluations, preventative care, and treatment, in accordance with current standards of medical practice.

II. Procedure:

A. Patients should be evaluated by a physician at a minimum of every 3 months in chronic care clinics. Appropriate progress note, and update of the HIV Clinic Flow Sheet, will be placed in the medical chart/EMR. Visits include, at a minimum:

- 1.) Updated history since last visit.
- 2.) Questioning (in non-threatening manner) regarding risk behavior and documentation of medication adherence.
- 3.) Documentation of any side effects from medications
- 4.) Review of all lab values, studies since last visit. LFT's, creatinine, BUN, blood sugar and lipid profile need to be performed every three months while on anti-retroviral therapy.
- 5.) Assessment/Documentation:
 - a. CDC classification
 - b. Response to current antiretroviral regimen, Patient Visit Categorization

- c. Any abnormal physical findings
- 6.) The clinician will update the Treatment Plan addressing, at a minimum:
 - a. Ordering of further testing based on current findings
 - b. Documentation of subsequent chronic care clinic return time frame (i.e., 3 months)
 - c. Education provided to the patient
- B. Prophylaxis will include:
 - 1.) For inmates with $CD4 > 200$:
 - a. Pneumococcal vaccine (booster q 5 years)
 - b. Influenza vaccine annually
 - c. Hepatitis A and B vaccine series if co-infected with Hepatitis C
 - 2.) For inmates with $CD4 < 200$
 - a. Pneumocystis carinii pneumonia (PCP)
 - i. TMP/SMX-DS I po qd or 3 X weekly (verify first that the inmate is not sulfa allergic)
 - ii. Dapsone 100 mg PO qd (REMEMBER check G6PD first)
 - iii. Pentamidine: 300 mg in 6 ml sterile water by aerosol q 4 weeks
 - iv. Atovaquone suspension: 1,500 mg once daily
 - b. Pap smear every 6 months for female patients for the first year and if normal, annually thereafter.
 - 3. For inmates with $CD4 < 100$
 - a. Toxoplasma gondii (in patients with + IgG toxo antibody titer)

- i. TMP/SMX-DS 1 po qd
 - ii. Dapsone 50 mg PO qd + pyrimethamine 50 mg PO q week + leucovorin 25 mg PO q week (folinic acid)
 - b. Ophthalmology exam to detect CMV retinitis
 - 4. For inmates with CD4 < 50
 - a. Mycobacterium avium intracellulare
 - i. Azithromycin 1,200 mg PO q week
 - ii. Clarithromycin 500 mg PO bid
- C. Certain Conditions will require consultation with an HIV/AIDS Specialist include:
1. Initiation of antiretroviral treatment.
 2. Consideration is given to changing the current antiretroviral Regimen
 - a. Failure of initial antiretroviral regimen
 - b. Utilization of any regimen not currently recognized as standard of care as listed in the most recent DHHS Guidelines.
 3. Use of Fusion Inhibitors (Fuzeon), new protease inhibitors (Tipranavir, Daronavir)
 4. Co-morbid conditions (HIV/Hepatitis A, B, C)
 5. Positive PPD
 6. Interruption of antiretrovirals
 - a. Either patient initiated or physician initiated
 - b. "drug-holidays"
 7. Serious complications/side effects occur
 - a. Co-infection with MTB

- b. Co-infection with Hepatitis C, Hepatitis B.
 - c. Individuals compromised by current Antiretroviral therapy
 - d. Co-infection with any other serious opportunistic infection, i.e. cryptococcus meningitis, toxoplasmosis encephalitis, etc.
8. Dementia/mental status changes
9. Laboratory or other diagnostic work-ups are inconsistent with clinical picture or natural history of HIV disease.
10. Consideration is being given to ordering further HIV testing
- a. Genotypic analysis
 - b. Phenotypic analysis
 - c. Drug level testing
11. Consideration is being given to stopping any opportunistic infection prophylaxis, or treatment. (CD₄ count of 200 or above must be maintained for at least 3 months)
12. Pregnant women with HIV infection.
13. Inmates with suspected acute HIV infection

III. References:

- A. 2006 edition, Medical Management of HIV Infection, John G. Bartlett, M.D., Professor of Medicine, Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, Maryland, MD. 2001-2002 Edition B.
- B. DHHS – Guidelines for the Use of Antiviral Agents in HIV Infected Adults and Adolescents, October 10, 2006 (updated).
- C. HIV Primary Care Practice Guideline to the Management of Persons infected with HIV; Recommendation of the HIV Medicine Association of IDSA (Sept 2004) Judith Aburg, Joe E. Gallant:
- D. DPSCSD 130-300: Pharmacy Services Manual, Section: Medication Administration

- E. DPSCSD 130-100, Section: Continuity of Care
- F. DPSCSD 130-200: Medical Management of Tuberculosis
- G. Public Health Service Task Accommodations for the Use of Antiretroviral Drugs in HIV.

IV. Rescissions: DPSCS 130-200 Surveillance and Treatment;
Staging and Medical Management of HIV
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OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 3
HUMAN IMMUNOSUPPRESSANT VIRUS (HIV)

Section 3
CONSIDERATION OF ANTIRETROVIRAL THERAPY (ART)

I. Policy:

All HIV infected inmates within the Maryland Department of Public Safety and Correctional Services (DPSCS) shall receive periodic medical evaluations, preventative care, and treatment, in accordance with current standards of medical practice.

II. Procedure:

A. The clinician has to make certain decisions in determining whether or not ART should be initiated, and must consider the following:

1. Ongoing HIV replication leads to immune system damage and progression to AIDS
2. The amount of virus in the blood, as measured by plasma HIV RNA (viral load) levels reflects the rate of disease progression to AIDS and death, while the CD4 cell count reflects the extent of disease progression.
3. Treatment decisions should be individualized, based upon measurements of plasma HIV RNA levels and CD4+ T-cell count and patients' willingness.
4. Maximum achievable suppression of HIV replication, preferably to undetectable levels on sensitive plasma HIV RNA assays (V/L <75 copies/ml, should be the goal of therapy.
5. The most effective means to accomplish durable suppression of HIV replication is the simultaneous initiation of combinations of effective anti-HIV drugs with which the patient has not been

previously treated and that are not cross resistant with antiretroviral agents with which the patient has been previously treated.

6. ART should be given in optimum schedules and dosages.
7. Any change in ART decreases the remaining pool of effective antiretroviral drugs.
8. Women should receive optimal ART regardless of pregnancy status.
9. Persons with acute primary HIV infections should be treated with combination ART to suppress viral replication below the limit of detection of sensitive plasma HIV RNA assays.
10. All HIV-infected persons, regardless of viral load, should be considered infectious and counseled accordingly.

B. The clinician's decision to initiate ART must also evaluate:

1. The patient's virologic status (measured by HIV RNA assays),
2. Immunologic status (measured by CD4+ T-cell count),
3. Comorbidities and
4. Patient preference and ability to adhere to complex drug regimens.

C. The clinician's decision to withhold ART, when therapy is indicated on virologic and immunologic grounds should always be based on an assessment of the individual. If ART is withheld, the decision should be revisited on a regular basis (every 3 months) with efforts aimed at overcoming barriers to adherence.

D. In general, ART should be offered when:

1. The patient has HIV-related symptoms, regardless of viral load or CD4+ T-cell count.
2. Plasma HIV RNA levels are greater than 55,000 regardless of assay used.
3. The CD4+ T-cell count is below 350 cells/mm³.

- E. Treatment may still be considered on an individual basis for asymptomatic patients with viral loads below the treatment threshold, and CD4+ T-cell count above 350 cells/mm³.
 - 1. In patients with low viral loads and high CD4+ T-cell count, treatment may be appropriately deferred with reevaluation every 3 months.
 - 2. The potential benefits of ART in patients with favorable prognosis based on viral load and CD4+ T-cell count must be weighed against the potential risks. These include:
 - a. adverse drug reactions,
 - b. development of drug resistance and
 - c. cross-resistance if viral replication is not effectively suppressed,
 - d. the need for life-long therapy and
 - e. the impact of complicated drug schedules on quality of life.
- F. In general, testing should be avoided within four weeks of an intercurrent illness or immunization.
- G. ART should be considered but not necessarily initiated in Pre-trial facilities or MRDCC for reasons of continuity, unless otherwise recommended by the DPSCS Infection Disease Consultant.
- H. Inmates entering pre-trial or DOC facilities for whom ART has been prescribed in the community, and for whom adherence has been documented up to the time of incarceration, should be considered for continuation of therapy.
- I. When continuing ART:
 - 1. If the inmate reports that he/she was previously on medication, but last dose of medication was more than two weeks, or reports that he/she is not currently on medication, the clinician will:
 - a. Do a clinical assessment.
 - i. If it is determined that there is no need for immediate follow-up care, the clinician shall obtain a signed release of information

- ii And forward to the current community based organization
 - b. Initiate a request for confirmation of HIV seropositivity to the DHMH State Laboratory via the DPSCS Infection Control Office.
 - c. Schedule detainee to return to HIV chronic care clinic in 14 days to review information from State Laboratory/CBO.
 - d. It is crucial that the assessment and treatment plan be documented at this time.
 - e. Within 14 days of initial assessment, clinician will review information from CBO/State Laboratory.
2. If VL, CD4 is outdated (>3mos), the clinician will:
- a. Order cd4 and VL.
 - b. Initiate COC form.
 - c. Schedule to return to HIV chronic care clinic in 14 days or upon receipt of laboratory results (if clinician assessment indicates no need for immediate follow-up care).
3. If CD4 and VL is current (<3months) and CD4 is less than 350 and /or VL is greater than 55,000 or if clinical presentation indicates the need for treatment, clinician will initiate Infectious Disease consult.
4. If appropriate (based on CD4 result) clinician will initiate prophylaxis for opportunistic infections at this time including:
- a. Initiation of an HIV CCC Flow Sheet
 - b. Initiation of a COC Form
 - c. Scheduling inmate to return to clinic in 1 month or per Infectious Disease Consultant recommendation.
- J. If no verification of treatment history was received from CBO, or if HIV status was unavailable from the State Laboratory, the clinician will:

1. Schedule HIV confirmatory test as soon as possible (if clinician assessment indicates there is not a need for immediate follow-up medical care).
 2. Upon receipt of HIV test result, initiate HIV COC appointment (within 14 days).
- K. If inmate reports positive HIV status at intake and is presently on ART and last dose of medication was <2 weeks and if clinician is convinced that the inmate has been compliant until within 2 weeks of the present time, every effort must be made to restart treatment. Clinician will then:
1. Verify prescriptions within 24 hours, using any/all of the following:
 - a. Medication in property
 - b. Treating physician/facility (obtain signed release for all pertinent information)
 - c. Community contact to bring empty medication vial to the facility for verification
 - d. If inmate is able to recall exact medication and dosing schedule, consider restarting medications pending later confirmation. (On occasion the inmate may claim to be perfectly compliant, but prescriptions cannot be verified in the usual manner).
 2. If prescriptions are verified, clinician will:
 - a. Restart confirmed prescriptions immediately utilizing stock antiretroviral medications (all antiretroviral medications will be ordered to start simultaneously). It is imperative that patients claiming to have been on Abacavir have confirmation that no hypersensitivity reaction has occurred.
 - b. Initiate HIV CCC Flow sheet and COC form, progress note. Schedule laboratory tests, and RTC date.

III. References:

- A. 2006 edition, Medical Management of HIV Infection, John G. Bartlett, M.D., Professor of Medicine, Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, Maryland, MD. 2001-2002 Edition B. DHHS – Guidelines for the Use of Antiviral Agents in HIV Infected Adults and Adolescents, October 10, 2006 (updated).

- B. HIV Primary Care Practice Guideline to the Management of Persons infected with HIV; Recommendation of the HIV Medicine Association of IDSA (Sept 2004) Judith Aburg, Joe E. Gallant:
 - C. DPSCSD 130-300: Pharmacy Services Manual, Section: Medication Administration
 - D. DPSCSD 130-100, Section: Continuity of Care
 - E. DPSCSD 130-200: Medical Management of Tuberculosis
 - F. Public Health Service Task Accommodations for the Use of Antiretroviral Drugs in HIV.
 - G. <http://AIDSinfo.nih.gov>
-
- IV. Rescissions: DPSCS 130-200 Surveillance and Treatment; Staging and Medical Management of HIV Infection
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OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 3
HUMAN IMMUNOSUPPRESSANT VIRUS (HIV)

Section 4
HIV POST EXPOSURE PROPHYLAXIS

I. Policy:

It is the policy of the Department that appropriate follow-up Care and treatment, including medications (PEP), will be readily available to all employees and inmates if an exposure to blood/and body fluids that may transmit blood borne pathogens has occurred.

II. Procedure:

A. DPSCS employees, employees of the medical contractor, inmate workers who experience occupational-related exposure, or inmates who experience exposure through altercation or by other means to HIV infected blood and body fluids shall be provided emergent counseling and treatment by a qualified health care professional in accordance with the following:

1. The injured skin or wound should be emergently cleansed with soap and running water for two minutes. Mild bleeding should be allowed to continue. Antiseptics, bleach, or other cleansing agents should not be used. Aspiration, forced bleeding, and wound incisions are not recommended. Mucous membranes should be rinsed with water for two minutes. Exposed eyes should be flushed with water or saline for two minutes.
2. The evaluating health care professional should interview the Injured worker to determine if a potential occupational exposure to HIV has occurred.
 - a. The worker must have had an occupational exposure to a source that is HIV infected or at high risk for potentially infectious for HIV (high risk materials include: semen, vaginal secretions, cerebrospinal fluid, pleural fluid, peritoneal fluid, synovial fluid, un-fixed tissue, certain lab

specimens, and any substance contaminated by visible blood)

- b. Exposure to visibly uncontaminated urine, feces and saliva does not require HIV post-exposure prophylaxis.
3. If an exposure or questionable occupational exposure to HIV has occurred, the evaluating health care professional should immediately, within 2 hours, review the incident with the Clinical Director or other physician designee (the regional infection control coordinator may be consulted) to determine if HIV post-exposure prophylaxis should be medically recommended or can be reasonably offered.
4. If the evaluating physician determines that an occupational exposure to HIV has occurred, the DPSCS employee should be referred to a community medical provider for ongoing treatment and monitoring once emergency medical care has been rendered. Information regarding the type of exposure, and if PEP was rendered, shall be documented and given to the injured employee as part of the referral process. Exposed inmates shall be offered HIV post-exposure prophylaxis if no medical contraindications exist and subsequently treated and monitored by a physician. The medical contractor employee shall be seen and treated in accordance with the contractor's employee health policies.
5. If it is determined that an occupational exposure has occurred that warrants PEP, and inmate is involved, but the HIV status of the inmate is unknown, the appropriate regimen should be initiated in accordance with CDC guidelines. Subsequently, inmate testing should be initiated.
6. The provision of emergency medical care to DPSCS employees may include the prescription of HIV anti-retroviral medications, not to exceed an emergency three day supply, if access to a community medical provider in a timely manner cannot be reasonably assured. The PEP Starter Kit will be available in each regional infirmary. Anti-retroviral medications may only be dispensed and administered to employees/inmates with the written or verbal order of the DPSCS Medical Director or physician designee. The DPSCS Medical Director shall be notified and support documentation sent to his office within twenty-four (24) hours or the next working day regarding use of the PEP Starter Kit.
7. After utilization of the PEP Starter Kit, the request for replacement should be made immediately using the non-formulary request form

that is signed by the Regional Medical Director. The exposed individual shall receive the additional twenty-seven (27) days of antiretroviral treatment from their respective occupational medical provider or in the case of inmate exposure, from the respective medical contractor.

8. Emergent doses of anti-retroviral medications should only be offered or recommended to exposed workers in accordance with CDC guidelines. Workers should be informed of the CDC recommendations, including but not limited to the risk, prevention, and drug treatment information included in the CDC HIV Post-exposure Prophylaxis Fact Sheet.
9. Emergent doses of anti-retroviral medications may have untoward effects, particularly in persons with underlying medical conditions, taking prescribed or over-the-counter medications, and during pregnancy. The provision of emergency doses of HIV anti-retroviral medications to employees/inmates with complicating conditions must be considered on a case by case basis after a careful discussion of the known risks and benefits of prophylaxis with the employee/inmate and whenever possible, the direct involvement of the employee's personal physician. The exposed worker's consent/declination for HIV Post-exposure Prophylaxis shall be noted on the HIV Post Exposure Prophylaxis Consent/Declination Form.
10. Employee and inmate workers with occupational exposure to HIV should have HIV antibodies measured at the time of exposure, at 3 months, and at 6 months. A negative HIV antibody 6 months following exposure confirms the absence of HIV transmission. HIV antibody testing should be conducted by community health care providers for employees in accordance with DPSCS policy and the institution's blood borne pathogen control plan.

B. Clinician must document any exposures to potential HIV:

1. The provision of HIV post-exposure prophylaxis to inmate workers should be documented in the inmate's medical record/EMR.
2. The provision of HIV post-exposure prophylaxis to DPSCS employees should be documented in the employee's health record/EMR.
3. Exposure Report should include the following relevant information:
 - a. Date and time of exposure

- b. Details of the procedure being performed, including where and how the exposure occurred, and if the exposure was related to a sharp device, the type of device and how and when in the course in handling the device the exposure occurred.
 - c. Details of the exposure, including the type and amount of fluid or material and the severity of the exposure (e.g., for a percutaneous exposure, depth or injury and whether fluid was injected; or for a skin to mucous-membrane exposure, the estimated volume of material and the duration of contact and the condition of the skin (e.g., chapped, abraded, or intact).
 - d. Details of the exposure source (i.e., whether the source material contained HIV or other bloodborne pathogen(s) and if, the source is an HIV infected person, the stage of the disease, history of anti-retroviral therapy, and viral load, if known.
 - e. Details about counseling, post-exposure management, and follow-up.
- C. The Office of Health Care Services Employee Blood/Body Fluid Contact Report shall be completed and submitted to the DPSCS Infection Control Administrator.

III. References:

- A. Public Health Services Guidelines for the Management of Healthcare Worker Exposures to HIV and Recommendations for Post-exposure Prophylaxis, MMWR November 20, 2008, /VOL 57/ No. RR-10
- B. PSCS 130-200, Involuntary Testing for HIV Infection
- C. DCD 130-200 Section: Custody, Protocol: (IXA) Correctional Employee Exposure to Blood/Body Fluid.

IV. Rescissions: DPSCSD #:130-200 SURVEILLANCE AND TREATMENT OCCUPATIONAL EDPOSURE, HIV

V. Date Issued: July 15, 2007

VI. Date Reviewed: July 2, 2009

OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 3
HUMAN IMMUNOSUPPRESSANT VIRUS (HIV)

Section 5
HIV FORMULARY AND STOCK MEDICATIONS

I. Policy:

DPSCS and medical contractor staff will be aware of formulary drugs available for the treatment of persons with HIV.

II. Procedure:

A. Clinicians prescribing medication for HIV will use the following Formulary:

HIV MEDICATIONS				
<i>Nucleoside Reverse Transcriptase Inhibitors (NRTI)</i>				
Abacavir	ABC	Ziagen	Tab/Soln	300, 20 mg/ml
Didanosine	ddl	Videx Videx EC	Tab Cap	25, 50, 100, 150, 200 125, 200, 250, 400
Emtricitabine	FTC	Emtriva	Cap	200
Lamivudine	3TC	Epivir	Tab, Liq	150, 300, 10 mg/mL
Stavudine	d4T	Zerit	Cap	15, 20, 30, 40
Zidovudine	AZT	Retrovir	Cap, Tab	100, 300
<i>Nucleoside Reverse Transcriptase Inhibitor (NRTI) Combination</i>				
Abacavir/Lamivudine		Epzicom	Tab	600/300
Abacavir/Lamivudine/Zidovudine		Trizivir	Tab	300/150/300
Emtricitabine/Tenofovir		Truvada	Tab	200/300
Lamivudine/Zidovudine		Combivir	Tab	300/150
<i>Nucleotide Reverse Transcriptase Inhibitor (RTI)</i>				
Tenofovir	TNV	Viread	Tab	300
<i>Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTI)</i>				
Delavirdine	DLV	Rescriptor	Tab	100, 200

Efavirenz	EFV	Sustiva	Cap	50, 100, 200, 600
Nevirapine	NVP	Viramune	Tab	200
<i>Nucleoside Reverse Transcriptase Inhibitor / Non-Nucleoside Reverse Transcriptase Inhibitor Combination</i>				
Efavirenz/Emtricitabine/Tenofovir		Atripla	Tab	600/200/300
<i>Protease inhibitors (PI)</i>				
Atazanavir	ATV	Reyataz	Cap	150, 200, 300
Darunavir		Prezista	Tab	300
Fosamprenavir	FPV	Lexiva	Tab	700
Indinavir	IDV	Crixivan	Cap	100, 200, 400
Nelfinavir	NFV	Viracept	Tab	250, 625
Lopinavir / Ritonovir	LPV/ RTV	Kaletra	Tab	50, 200
			Soln	80-20/mL
Ritonovir	RTV	Norvir	Cap/Susp	100, 80 mg/ml
Saquinavir	SQV	Invirase	Cap, Tab	200, 500
Tipranavir	TPV	Aptivus	Cap	250

- B. Enfuvirtide (Fuzeon[®]) injectable is available by non-formulary request.
- C. The pharmacy vendor will maintain a group of “stock” medications for use in getting individuals started on medications in the most time efficient manner. Those medications include:

Medication	Dose
Aptivus	250 mg
Atripla	600/200/300
Combivir	150/300
Emtriva	200 mg
Epivir	150 mg
Epzicom	600/300
Kaletra	200/50
Invirase	200 mg
Invirase	500 mg
Lexiva	700 mg
Novir	100 mg
Prezista	300 mg
Reyataz	300 mg

Sustiva	600 mg
Trizivir	300/150
Truvada	200/300
Videx EC	400 mg
Viracept	625 mg
Viread	300 mg
Zerit	40 mg
Ziagen	300 mg

- III. References: None
- IV. Rescissions: None
- V. Date Issued: September 15, 2007
- VI. Date Reviewed: July 2, 2009

OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 3
HUMAN IMMUNOSUPPRESSANT VIRUS (HIV)

Section 6
HIV "Opt-Out" testing Program

I. Policy:

All inmates within the Maryland Department of Public Safety and Correctional Services (DPDS and DOC) will be tested for the presence of HIV in a healthcare setting unless the inmate, upon learning of the testing, specifically indicates a refusal for such testing, in which case he or she "opts out" of the HIV testing program.

All inmates will also be offered testing for HIV 90 days prior to planned releases from the system when the dates of those releases are provided to medical staff for planning and providing such testing.

II. Procedure:

A. The Intake process already requires that blood is drawn from inmates for RPR (syphilis) testing.

1. With this policy, inmates will be informed that the blood will also be tested for HIV.
2. The inmate, when informed, has the right to "opt out" by specifically refusing HIV testing. All refusals will be documented in the EMR (electronic medical record).
3. Pre-test information related to HIV viruses will be given to the inmate.

B. HIV testing will also be done for all DOC inmates with a known release date from the system 90 days prior to that release.

1. This service will not be offered to DPDS detainees.

2. Pre-test information related to HIV viruses will be given to the inmate.
 3. Inmates to opt for this screening may be screened using an oral swabbing technique if it is available, or they may have their blood work processed using the medical contractor's laboratory as opposed to the State lab.
 4. As on Intake, inmates have the right to refuse this pre-release testing but all such refusals will be recorded in the EMR.
- C. Any inmate may be screened for HIV in a healthcare setting related to chronic care, sick call, infirmary care, trauma, receiving screening, etc. once he or she is informed by the healthcare professional that the screening tests will include the HIV testing unless the inmate refuses the testing or "opts out", in which case, the refusal will be documented in the EMR.
- D. The informed consent to be used in seeking the inmates' consent for testing will include the information about the purpose of the HIV testing and will provide the individual with enough information to make an informed consent.
1. NO separate consent form is necessary for HIV testing.
 2. Documentation of the conversation between the inmate and the healthcare professional regarding the testing must be entered into the EMR.
 3. Documentation for any refusal for testing must also be entered into the EMR. A separate refusal form will NOT be needed in the cases of "Opt Outs". The EMR entry that indicates the inmate opted out" is sufficient for documentation.
- E. Pre and Post Test Counseling should be succinct as well as culturally and linguistically appropriate for the individual.
1. Pre Test HIV counseling can be communicated through brochures, handouts, video tapes, or by direct training by a counselor or provider.
 2. At a minimum, counseling will include basic risk reduction education that is tailored to the inmate's needs, and that counseling should be brief.

3. Post-Test counseling of inmates with positive test findings is always conveyed by health care professionals and always in a face to face meeting.
 - a. Post test counseling should include an expedited mental health referral as well as linkage to care and support services.
 - b. Post test counseling will also include information on prevention of the spread of the disease and of risk reduction.
- F. All inmates identified as HIV positive will be enrolled in a chronic care clinic and receive additional testing as well as specialty consultation consistent with DPSCS's Infection Control Manual chapters related to HIV.
- G. The medical contractor will submit an Excel spreadsheet monthly and quarterly and that sheet will include at a minimum:
 1. The names and DOC numbers of all persons offered HIV testing,
 2. The facility offering the testing,
 3. Inmate demographic information to include age, race, and gender, and
 4. Those who accepted testing as well as those who opted out of testing.

III. References:

- A. CDC Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings, September 26, 2006
- B. Maryland House Bill 781/Senate Bill 746 Workgroup Report Final (2007 Legislative Session)

IV. Rescissions: None

V. Date Issued: March 1, 2008

VI. Dave Reviewed July 8, 2009

OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 4
TUBERCULOSIS

Section 1
GENERAL GUIDELINES

I. Policy:

All inmates within DPSCS shall be screened for tuberculosis infection and followed as medically indicated. Every inmate, including parole retakes, transfers, self reporting etc., shall be screened for TB history and TB symptoms during the medical intake evaluation and routinely screened annually. Tuberculosis screening will also occur when signs and symptoms suspicious for tuberculosis are documented and there are no contraindications for skin testing. Preventive and therapeutic modalities for controlling and treating tuberculosis will be instituted according to community standards of medical practice

II. Procedure:

- A. Every detainee admitted into an intake facility/CBIF shall be screened for TB history and TB symptoms during the receiving screening process using the Reception/Receiving Screening Form
1. When a detainee responds "Yes" to any of the TB symptoms questions, the nurse on duty shall interview the patient to determine the need for further evaluation. A detailed symptom history shall be documented on the Tuberculosis Intake Assessment.
 2. Detainees with a history of a cough greater than 3 weeks duration and who have one or more of the symptoms fever, night sweats, weight loss, and/or hemoptysis shall be masked with a protective mask (without a valve) and taken to a private room in the medical area for immediate evaluation.
- B. The intra dermal Mantoux Tuberculin Skin Test (TST) will be utilized for the screening for latent and active tuberculosis. Inmates with a history of BCG vaccination shall receive a TST regardless of the BCG history and interpreted using the criteria for a positive TST.

1. Nursing staff will be trained to perform Tuberculin Skin Testing (TST) according to the standards set by the Maryland Department of Health and Mental Hygiene's (DHMH) Division of Tuberculosis Control. The test will be planted and read within 72 hours of entry into an Intake facility by a nurse who has received competency based training in PPD implantation and reading and can demonstrate that competency upon request. The results will be recorded in millimeters in the medical record. Absence of a reaction shall be recorded as "0 mm", not as "negative".
2. A tuberculin skin test within DPSCS shall be considered positive if the result measured is greater than or equal to 10 mm indurations; or there is an increase of 5 mm indurations, or more, if the following tuberculosis risk factors are present:
 - a) HIV Infection/HIV risk factors (including drug use), with unknown HIV status
 - b) Recent contacts of an active TB case
 - c) Fibrotic changes on chest radiograph consistent with prior TB
 - d) Detainees with organ transplants
 - e) Other immunosuppressed detainees (receiving the equivalent of >15 mg/day of Prednisone for one month or more)
 - f) Chronic disease, silicosis, diabetes, renal dialysis etc
3. Testing for HIV infection will be offered to all tuberculin-positive inmates with a reading of 5 mm or greater, with HIV infection risk factors. All HIV positive inmates shall receive a baseline anterior chest x-ray regardless of the TST.
4. Anyone testing positive for TB shall have a Chest x-ray within 5 working days.(Exception: Pregnant women)
 - a) Pregnant women with a positive TST shall receive screening chest radiographs during the second or third trimester with shielding of the abdomen.
 - b) Pregnant women with past positive TST will be interviewed regarding TB symptoms and documented in the medical

record. Chest radiographs should be obtained in the first trimester only if the inmate has symptoms suggestive of tuberculosis or the woman is known to be a close contact to a TB case, or is HIV positive.

5. Inmates with positive TB skin tests at reception may not be transferred from the intake facility to another DPSCS facility until their screening chest radiograph has been read by a physician as negative for evidence of pulmonary tuberculosis.
6. TST log documentation will include the date of the PPD reading and chest x –ray date of all TST positive inmates/detainees.
7. Positive TST will necessitate a referral to a physician for medical evaluation/TB symptom review.

C. Inmate Refusal of Testing or Therapy,

1. Inmates who refuse tuberculosis screening shall be interviewed and counseled by medical personnel regarding the importance of tuberculosis screening for public health reasons. Reason for refusal and notification to ordering clinician will be documented in the medical record.
2. Chest x-ray will not be substituted for the refused TST.
3. Asymptomatic inmates without clinically suspected tuberculosis that do not comply with screening procedures shall be assigned to administrative segregation for public health reasons.

The contractor Infection Control nurse shall notify the ordering clinician within 24 hours of all refusals. The DPSCS TB Control nurse should be notified via phone, fax or e-mail about the inmate name, DOC number, facility offered TB testing and date refused. This inmate has to be revisited monthly by the IC nurse with documentation in the EMR.

The clinician review should be done in 3 months, 6 months and 1 year in segregation.

Under special circumstances after 1 year of segregation the Regional Medical Director has the authority to order a chest x-ray.

4. Inmates with positive TST, who refuse HIV testing, will receive yearly screening chest radiographs indefinitely and a review of symptoms of TB; unless there is a documented history of TLTB completion.

5. HIV sero-negative TST positive inmates who are candidates for TLTBI and refuse treatment will receive yearly screening for symptoms of active tuberculosis after baseline CXR has ruled out pulmonary disease. They will receive additional education and counseling regarding the disease processes and symptom review for TB.
6. Inmates with clinically suspected tuberculosis based on signs/symptoms of TB or abnormal chest radiograph who do not comply with the screening procedures shall be assigned to respiratory isolation. Follow up DPSCS notification process relating isolation cases. If tuberculosis is diagnosed in noncompliant inmates, the inmate shall remain in isolation until considered no longer contagious.

D. Treatment of Latent Tuberculosis Infection (TLTBI) will be initiated and monitored.

1. TLTBI shall not be initiated until active tuberculosis has been eliminated as a potential diagnosis through chest radiographs and other diagnostic studies as clinically indicated. Baseline CXRs prior to initiating TLTBI are necessary as follows:
 - a) If TB symptoms are present, clinician will obtain new CXR and place individual in respiratory isolation.
 - b.) If individual is HIV infected or HIV status is unknown, clinician will obtain a baseline CXR which must be done within one month of initiating TLTBI.
 - c) For all other detainees, clinician will obtain a baseline CXR then repeat the chest x-ray or do symptoms review for tuberculosis.
2. TLTBI is to be considered when the following indications have been identified and contraindications do not exist:
 - a) Positive TST is documented within the prior two (2) years of the medical review (regardless of age) and there is no history of completed TLTBI or treatment for active tuberculosis.

- b) Positive TST regardless of the date of documentation, and regardless of age, with the following concurrent medical conditions:
 - i. HIV Infection; (Highest Priority);
 - ii. History of injection drug use;
 - iii. Hematological or reticuloendothelial neoplasms;
 - iv. Systemic corticosteroids usage equivalent of 15 mg/day Prednisone or greater for > 3 months, or other immunosuppressive therapy;
 - v. Silicosis;
 - vi. Renal dialysis;
 - vii. Insulin dependent or poorly controlled diabetes mellitus;
 - viii. Nutritional deficiencies associated with 10-15% reduction in ideal body weight, including gastrectomy and intestinal bypass;
 - ix. Carcinomas of the oropharynx and upper gastrointestinal tract.
 - x. Close contact to a pulmonary TB case with a positive TST equal to or greater than, 5 mm induration (regardless of age).
 - Xi HIV infected close contacts of a pulmonary TB case (regardless of TST result and/or history of prior TLTBI).
 - xii. Recent converter status.
- 3. A sentenced inmate, identified as a candidate for TLTBI at any DOC intake facility, shall have the regimen initiated, regardless of the length of assignment to those facilities.
- 4. TLTBI will only be initiated for those inmates in pre-trial facilities (CBIF and BCDC), who are confirmed dually infected, i.e. HIV positive with a documented TST of 5 mm or greater and a normal chest x-ray

5. Inmates received at CBIF and BCDC, who were on TLTB prior to intake at those facilities, shall be continued without interruption.
6. All TLTB will be prescribed by a physician and tracked utilizing the DHMH Form 851A, DPSCS Treatment for Latent Tuberculosis Infection Record and the DPSCS Infectious Disease Database.
 - a) Documentation of TB medication administration shall be done on the Medication Administration Record (MAR) as ordered by the provider and provided to the DPSCS Infection Control Office.
 - b) Baseline Liver Function Tests (LFTs) will be obtained before initiating therapy. LFTs will be repeated monthly and additionally upon presentation of clinical symptoms of adverse reaction. Abnormal liver enzymes results that are twice normal or higher will be evaluated in relation to other diseases prior to initiation of TLTB therapy.
 - c) Inmates with normal baseline LFTs will be formally assessed by nursing staff at monthly intervals for symptoms of hepatotoxicity: anorexia, nausea, vomiting, abdominal pain, jaundice and fatigue, with results recorded on the DHMH Form 851A (Regimen for Treatment of Latent Tuberculosis Infection).
 - d) Each time medications are administered, Inmates on TLTB shall be directed to report any symptoms of hepatotoxicity to the nursing staff. TLTB shall be immediately discontinued if symptoms of hepatotoxicity are reported, pending evaluation by a physician.
 - e) TLTB should be discontinued if LFTs results increase to 3-5 times normal or other serious side effects occur. The DPSCS Medical Director/Infection Control Administrator/designee shall be notified in writing within 5 working days of all discontinuations due to hepatotoxicity. Documentation of medication discontinuation related to toxicities shall be placed in the Infectious Control Data base and on the medical record.
 - f) Inmates receiving TLTB and concurrent Dilantin (Phenytoin) therapy should have serum levels of Phenytoin monitored monthly. Any medications impacted by protein binding displacement should be monitored.

- g) Treatment regimens for TLTBI in pregnant women shall only be initiated after consultation with the Infectious Disease consultant /OB consultant and the DHMH pulmonologist consultant.
- h) The standard regimen for TLTBI, is INH for 9 (nine) months (78 doses), regardless of HIV status and includes:
 - i. INH 15mg/kg (MAX. 900 mg.) is prescribed twice weekly.
 - ii. Pyridoxine 50 mg. (Vitamin B₆) is to be given concurrently with INH twice weekly.

- 7. Consultation with the DPSCS Infection Control Administrator/designee is necessary for inmates receiving alternate TLTBI /Active TB treatment. Further consultation with the DPSCS Medical Director/designee shall occur before such regimens are ordered and continued.
- 8. In those cases when TLTBI has been interrupted, resolution of the case shall be determined on a case-by-case basis, following consultation with the DHMH TB Control Division, and the DPSCS Medical Director/Infection Control Administrator/designee.
- 9. Upon completion of the TLTBI record (DHMH 851A Form [DPSCS Treatment for Latent Tuberculosis Infection Record]), page one of the carbon copy will be forwarded to the DPSCS Infection Control Administrator/ Infection Control designee. The remainder stays in the inmate's clinical record.

E. All inmates being released while on medication for the treatment of

TLTBI shall be referred by the Regional Infection Control Coordinator to the local health department for continuation of treatment. No medication is to be given to the inmate at release. The referral process is as follows:

- 1. The DPSCS Infection Control Office shall be notified as soon as possible when the release date is known.
- 2. Medical contractor will forward all appropriate information (Continuity of Care [COC] form, DHMH 851A Form, PPD sheet, CXR results, TLTBI MAR, HIV status, hepatitis status and LFTs), by fax to the DPSCS Infection Control office as well as to the local

health department. The inmate's current address shall be on the DHMH 851A Form, as well as the COC form.

3. The Continuity of Care form shall identify the need for continuation of tuberculosis treatment, and state that a referral was made to the local health department. The local health department will be contacted and given the information from the Regional Infection Control Office.
4. If the inmate is released without prior notification to the medical department, the information listed above shall be submitted to both the DPSCS Infection Control Office as well as the local health department as soon as the release is known.

F. Diagnosis and Treatment of Active Tuberculosis will include that:

1. Any inmate with clinical symptoms of tuberculosis, regardless of skin test or chest radiograph results, will be evaluated for the diagnosis of active tuberculosis and placed in respiratory isolation
 - a) Morning sputum samples shall be obtained 24 hours apart for three (3) consecutive days and, without exception, sent to the state laboratory for culture and sensitivity.
 - b) If the sputum specimen is not obtained under direct observation, the nurse shall instruct the inmate on how to obtain an adequate specimen. The inmate shall be given instructions as follows:
 - i. Clean and rinse the mouth with water (no mouthwash or toothpaste).
 - ii. Breathe very deeply three times.
 - iii. After the third breath, cough hard to bring up sputum from deep in the lungs.
 - iv. Expectorate 5-10 ml of sputum into a sterile container.
 - c). If an adequate, naturally obtained sputum sample cannot be produced, sputum induction shall be initiated in accordance with Department policies and procedures.
 - d). Tuberculosis treatment will be reported, initiated and monitored according to the Standard TB Treatment Regimen the First Line TB Drug Dosages:

2. When an inmate with suspected tuberculosis is started on TB treatment, the Regional Infection Control Coordinator shall complete the Maryland Tuberculosis Case/Suspect Report form DHMH 4501, and submit it to the DHMH Division of TB Control, with a copy submitted to the DPSCS Infection Control Administrator/designee.
3. The DPSCS Medical Director/DHMH pulmonary consultant is to be consulted before the initiation of chemotherapy for suspect active tuberculosis cases. The Regional Medical Director will discuss the case and the proposed treatment with the DPSCS Medical Director/DHMH pulmonary consultant.
 - a) All inmates with sputum smears positive for AFB will be prescribed four-drug therapy by a physician in accordance with Appendix 10, First Line TB Drug Dosages, unless contraindications to this regimen exists
 - b) Active or suspected tuberculosis disease shall not be managed with a single drug. A single drug shall not be added to a failing regimen for active tuberculosis
 - c) If sputum smears are negative, but active pulmonary tuberculosis is clinically suspected, empiric therapy with four drugs should be initiated. Other potential diagnoses should be actively excluded while maintaining respiratory isolation. CT scan of the lung to rule out neoplasm and/or bronchoscopy could be considered. Consultation with an Infectious disease specialist or Pulmonologist should be sought.
 - d) Documentation of TB medication administration shall be done on the Medication Administration Record and then provided to the DPSCS Infection Control Office as well as the local health department monthly.
 - e) Any non-adherence to tuberculosis treatment shall be reported in writing to the Department's Infection Control Administrator/designee and the medical contractor's statewide Infection Control Administrator.
4. Inmates prescribed an aminoglycoside antibiotic will receive a baseline audiogram, repeated monthly or sooner if clinically indicated.

5. Inmates prescribed Ethambutol will receive baseline visual acuity (Snellen chart) and color vision assessment (Ishihara chart), repeated monthly or sooner if clinically indicated. Any symptom or complaint of changed visual status while on Ethambutol (i.e., blurred vision) shall be referred to an ophthalmologist for evaluation ASAP. Ethambutol is to be discontinued pending the ophthalmologic evaluation.
6. Most forms of extra-pulmonary tuberculosis disease are generally treated for 6 (six) months. The DPSCS Medical Director/designee shall be consulted on all cases of extra-pulmonary tuberculosis for treatment guidelines
7. HIV/TB co-infection is treated with the same regimens as tuberculosis without HIV infection, unless the inmate is being treated with a certain protease inhibitor or non-nucleoside reverse transcriptase inhibitor (NNRTI) anti-retroviral drugs.
 - a) Rifampin is often contraindicated in combination with these drugs, so an alternative non-standard tuberculosis treatment regimen must be used in consultation with the DPSCS Medical Director/Infectious Disease consultant/ and DHMH TB Control.
 - b) A copy of the consultation report shall be FAXED to the DPSCS Medical Director.
 - c) Inmates receiving treatment for active tuberculosis that are HIV infected and whose CD4 count is below 100 are not to be treated with highly intermittent (i.e., once or twice weekly) regimens. These inmates are to receive daily therapy during the intensive phase (2 months), and daily or three doses a week during the continuation phase (4 months). Consultation with the DHMH pulmonary consultant, and the DPSCS Medical Director/Infection Control Administrator, is required before this alternate treatment regimen is initiated.
8. For Inmates with active tuberculosis with contraindications or intolerance to certain anti-tubercular medications, or multi-drug resistant tuberculosis, clinician will prescribe an alternative drug regimen in consultation with the DHMH pulmonary consultant, the DHMH Division of TB Control and appropriate sub-specialists as clinically indicated.
9. Inmates found to exhibit intolerance to TB chemo-prophylactic drugs shall receive yearly screening for symptoms of active

tuberculosis after baseline CXR has ruled out pulmonary disease.

- G. Clinical and/or chest radiograph improvement in the absence of positive TB cultures are strongly suggestive of culture negative pulmonary TB (abacillary) and can be treated with an abbreviated course of therapy. To confirm this diagnosis, Clinician will order that staff:
1. Collect three (3) consecutive sputum samples monthly for culture sensitivity until smear and cultures convert to negative. Inmates whose initial CXR is cavitory, and who fail to convert their sputum cultures to negative in 2 months, should have treatment extended an additional three (3) months (total 9 months).
 2. A posterior-anterior baseline chest x-ray, lateral and apical views. Upon completion of therapy, this will be repeated unless otherwise clinically indicated.
 3. A baseline CBC and chemistry panel, to include liver function tests, renal function tests and uric acid level. All abnormal laboratory results should be addressed in the progress note with a plan related to the potential impact on treatment.
 4. A symptom review to be conducted weekly in accordance with guidelines for providing TLTBI.
- H. Respiratory Isolation will be implemented when pulmonary tuberculosis is suspected or confirmed.
1. The isolation room must be aired for 1 (one) hour following an inmate discharge from the room if the inmate had a confirmed case of a contagious respiratory disease. This does not mean that a regional transfer to the isolation cell can not take place. The inmate maybe masked and placed in an isolated area pending completion of the cleaning. An inmate worker shall wear a DPSCS designated respirator while cleaning the isolation room during the airing period.
 2. A tuberculosis nursing assessment should be completed by the Regional Infection Control Nurse/designee on the DHMH Off-site Tuberculosis Consult Request Form and the Regional Medical Director/designee shall complete the Medical Consultation Request Form both providing copies to the DPSCS Infection Control Administrator/designee for presentation to the DHMH pulmonologist for a tuberculosis consultation.
 - a) Consults are held weekly on Tuesdays from 7:30 a.m. to 9 a.m., via telephone or on-site visit, at (410) 767-6698 or

5209; DHMH TB Control, 201 W. Preston St. in Room 301, Baltimore, MD.

- b) This conference requires participation from all regional Infectious Disease staff that has suspected/confirmed TB cases that are being presented.
3. All local health departments shall notify the contractor's statewide Infection Control Administrator and the DPSCS Infection Control Administrator/designee immediately of any individual who is in treatment for active tuberculosis and has missed their appointments and the health department is unable to locate the person in the community.
 - a) This person may already be in the DPSCS pretrial system following a recent arrest and measures must be taken to protect the health and safety of other inmates, correctional and medical staff working in the pretrial setting.
4. All admissions and discharges from AFB isolation units to include any contact isolation cases shall be ordered by the Regional Medical Director/designee in consultation with the DPSCS Medical Director/designee. A physician will summarize the inmate's treatment plan, final medical diagnosis, and need for scheduled follow-up in a discharge note documented in the medical record.
5. Within 24 hours of an admission and discharge to and from the respiratory isolation unit, the Regional Infection Control Administrator shall report in writing to the DPSCS Infection Control Administrator/designee and the contractor's statewide Infection Control Administrator.
 - a) This report will include a copy of the physician orders and the infirmary admission physical.
 - b) Upon discharge from the respiratory isolation unit a copy of the physician orders to include a discharge diagnosis shall be provided.
 - c) Discharges from the AFB isolation units shall be evaluated on a case by case basis and shall be in accordance with the following:
 - i. An inmate with a confirmed case of tuberculosis shall remain in isolation for at least two weeks of adequate treatment, until sputum smears are negative x 3, (to be collected on days 12, 13, and 14

of medication treatment), and the inmate is clinically and/or radiographically improving.

- ii. Inmates with confirmed cases of multi-drug resistance tuberculosis, defined as resistant to at least INH and Rifampin, shall remain in isolation for at least four weeks of adequate treatment and until sputum smears and cultures are negative x 3 (three), isolate sensitivities are available, and the patient is clinically improving.
 - iii. If AFB smears are negative, but tuberculosis is suspected based on clinical impression and chest radiograph findings, the inmate is to be housed in AFB isolation for two weeks of tuberculosis treatment and released when clinically improving. The inmate is to be maintained on tuberculosis treatment until the sputum or bronchial washing culture results are available, at which time the need for continued treatment is to be assessed.
- d) The Regional Infection Control Coordinator shall immediately notify the DPSCS Infection Control Administrator/designee, as well as the applicable local health department, and contractor's statewide Infection Control Administrator regarding inmates being released to the community from respiratory isolation that occur prior to obtaining the final diagnosis (TB has not been ruled out). Notification is to occur as soon as the Regional Infection Control Office is aware of the release or impending release.
 - e) An inmate with three negative sputum's for AFB samples, no symptomatic complex of TB (cough, fever, hemoptysis, weight loss, night sweats) and a clear chest x-ray may be discharged from respiratory isolation by the Regional Medical Director following discussion with the DPSCS Medical Director/ designee.
 - f) Inmates with persistent symptomatic complex of TB and a persistently abnormal CXR must remain in respiratory isolation until a diagnosis of TB is RULED OUT, in consultation with the DHMH pulmonologist/DPSCS Infectious Disease consultant/ DPSCS Medical Director/designee.

- case.
- f) Prioritize the contact investigation by the case's duration of stay in each site (or, if available, by the duration of time that each contact was exposed). Those with the most exposure will be considered the "highest priority contacts" and be tested first. Depending upon the infection rate among the highest priority group, a decision will be made regarding testing other identified contacts.
 - g) Search records to identify current location of "highest priority contacts".
 - h) Conduct medical record review for each "highest priority contact" to determine prior TST, chest radiograph, history of TLTB I or TB treatment, HIV status and other medical conditions.
4. The clinician will initiate a list for contact evaluations for and prioritize contacts currently within DPSCS as follows:
- a) HIV positives (regardless of prior TST or history of TLTB I) – do a baseline TST, CXR and if negative, initiate a full-course of presumptive TLTB I regardless of the TST result.
 - b) Prior positive TST (HIV negative or unknown) – do a symptom review and if symptoms exist do a CXR and offer Orasure HIV screening if status unknown.
 - c) Prior negative TST (HIV negative or unknown HIV status) – do a symptom review, TST, offer HIV testing (if status unknown) and CXR to those who convert to a positive TST, and initiate TLTB I.
5. Employee health will identify exposed employees and conduct a contact investigation as above.
6. In conjunction with DHMH Division of Tuberculosis Control, clinician will make a decision regarding the need to expand the investigation based upon the infection rate.
7. Medical contractor will provide follow-up tuberculin skin testing to contacts initially TST negative (10-12 weeks after exposure to the index case ended) and make referrals to local health departments for those no longer incarcerated.
- J. The Infection Control Administrator/designee shall notify the DPSCS Medical Director, DPSCS Director of Inmate Health Services, DPSCS

Director of Employee Health, and the medical contractor's statewide Infection Control Administrator of any need for a contact investigation, and will be responsible for calculating the infection rate (number of TST conversions divided by the number skin tested) to determine the infection rate for the follow-up tuberculin skin test and the need to expand the investigation.

III. References:

- A. Update: Adverse Event Data and Revised American Thoracic Society/CDC Recommendations against the Use of Rifampin and Pyrazinamide for Treatment of Latent Tuberculosis Infection--- United States, 2003, August 8, 2003 /52(31); 735-739.
- B. American Thoracic Society/Centers for Disease Control and Prevention/Infectious Disease Society of America: Treatment of Tuberculosis. American Journal of Respiratory and Critical Care Medicine. Vol. 167/No. 4, 2003, 603-662.
- C. Maryland Department of Health and Mental Hygiene. Guidelines for Prevention and Treatment of Tuberculosis-2003.
- D. American Thoracic Society /Centers for Disease Control and Prevention. Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection. American Journal of Respiratory and Critical Care Medicine. Vol. 161/No.4, 2000, S221-S247.
- E. Centers for Disease Control and Prevention. Prevention and Control of Tuberculosis in Correctional Facilities: Recommendations of the Advisory Council for the Elimination of Tuberculosis. MMWR 1996; 45 (No. RR-8).
- F. Centers for Disease Control and Prevention. Update: Fatal and Severe Liver Injuries Associated With Rifampin and Pyrazinamide for Latent Tuberculosis Infection and Revisions in American Thoracic Society /CDC Recommendations. MMWR 2001; 50 (No. RR-34).
- G. Centers for Disease Control and Prevention. Prevention and Treatment of Tuberculosis Among Detainees Infected with Human Immunodeficiency Virus: Principles of Therapy and Revised Recommendations. MMWR 1998; 47 (No. RR-20).

- H. Centers for Disease Control and Prevention. Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health Care Facilities, 1994. MMWR 1994; 43 (No. RR-13).
- I. Centers for Disease Control and Prevention. Acquired Rifamycin Resistance in Persons with Advanced HIV Disease Being Treated for Active Tuberculosis with Intermittent Rifamycin- Based Regimens. MMWR 2002; 51(10); 214-5.
- J. American Thoracic Society. Control of Tuberculosis in the United States. American. Review of Respiratory Diseases. Vol. 146:1623, 1992.
- K. COMAR 10.06.01 - Communicable Diseases

- IV. Rescissions: All previous editions of the DPSCS Tuberculosis Control Guideline
- V. Date Issued: July 15, 2007
- VI. Date Reviewed: September 22, 2009

OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 4
TUBERCULOSIS

Section 2
SPUTUM COLLECTION

I. Policy:

The Department of Public Safety and Correctional Services/OIHS is committed to providing a high standard of quality care for inmates residing in AFB Isolation Units in a manner that provides for the safety of all inmates, correctional officers, and health care professionals as it relates to communicable respiratory diseases.

II. Procedure:

- A. Any inmate who presents with symptoms that require an admission to an AFB Isolation Unit for the purpose of ruling out active tuberculosis shall have sputum specimens collected in clean wide mouthed and leak proof specimen containers. (Single use disposable plastic [50 ml capacity] is preferred.)
- B. To ensure optimal recovery of the TB bacilli from sputum, the health care professional shall collect and process three specimens. All three specimens shall be "early morning" specimens collected on three successive days since such samples often contain more bacilli and thus are more likely to be positive by microscopy.
- C. The health professional will provide clear instruction to the inmate on the proper collection of a specimen for TB. The instruction shall include:
 1. Specimens should be obtained in an isolated, well-ventilated area.
 2. During specimen collection, patients produce an aerosol that may be hazardous to health care workers or other patients in close proximity.

3. For this reason, precautionary measures for infection control must be followed during sputum induction, including:
 - i. Understanding the importance of sputum examination for diagnosis or follow-up of TB.
 - ii. How to open and close the containers.
 - iii. The need for collecting real sputum, not saliva.
 - iv. How to produce good sputum (i.e., by repeated deep inhalation and exhalation of breath followed by cough from as deep inside the chest as possible)
 - v. How to avoid contamination of the exterior of the container (i.e. by carefully spitting and closing the container)
 - vi. How to collect and safely deliver the morning sputum to the laboratory
 - vii. The need for three sputa to facilitate diagnosis. [Please follow the DHMH Sputum Collection Guidelines, September 2008]
- D. For inmates on treatment, follow-up specimens may also be ordered at intervals specified by the DHMH State Pulmonary specialist.
- E. After the sputum specimen is collected the health care professional shall follow the instructions provided by the DHMH State laboratory prior to transport of the specimen contained in the specimen container.
- F. Culture examinations should be done on all specimens, regardless of AFB smear results. The BACTEC Radiometric System or other recently developed liquid medium systems allow detection of mycobacterial growth in 4 to 14 days.
- G. Laboratory examination of the specimens is needed as detection of acid-fast bacilli (AFB) in stained smears examined microscopically may provide the first bacteriologic clue of TB.
 1. Fluorochrome staining with auramine-rhodamine is the preferred staining method because it is faster than the traditional methods in which Ziehl-Neelsen or Kinyoun (basic fuchsin dye) stains are used.
 2. Smear examination is an easy and quick procedure; results

should be available within 24 hours of specimen collection.

3. Smear examination permits only the presumptive diagnosis of TB because the AFB in a smear may be mycobacteria other than *M. tuberculosis*.

4. Furthermore, many TB patients have negative AFB smears.

H. It is the responsibility of the primary health care provider to promptly report all suspected or confirmed cases of TB to the health department so that a contact investigation can be initiated as quickly as possible.

- III. Reference:
- A. Prevention and Control of Tuberculosis in Correctional and Detention Facilities Recommendations from CDC July 7, 2006/MMWR 55(RR-9); 1-64
 - B. Management of Tuberculosis (Federal Bureau of Prisons–Clinical Practice Guidelines) December 2004
 - C. Acid Fast Direct Smear Microscopy – Module 3 Collection and Transport of Tuberculosis Specimens Centers for Disease Control 3/6/06
 - D. Draft DPSCSD 130-200 Infection Control AFB Isolation 2/07
- IV. Rescissions: DPSCSD #: 130-200 Sputum Collection – Transport of Tuberculosis Specimens
- V. Date Issued: July 15, 2007
- VI. Date Reviewed: September 22, 2009

OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 5
ISOLATION

Section 1
INMATES WITH INFECTIOUS DISEASE
(Formerly Transfer of Inmates with Infectious Disease)

I. Policy:

Inmates with contagious infections (except in the case of exclusive tuberculosis) will be housed in Medical Isolation to reduce the risk of exposure to the general population. Isolation will continue only as long as deemed appropriate by the medical authority. Inmates in Isolation shall be permitted to participate in as many programs and services as possible subject to considerations of health and safety.

II. Procedure:

A. To facilitate the placement of contagious/infectious persons, the contracted vendor's Medical Director will:

1. Make the determination that an inmate is contagious;
2. Order the inmate's removal from the general population;
3. Determine an appropriate housing assignment;
4. Complete a Transfer of Housing Assignment Form, and forward a copy to the Traffic Office and to the Shift Commander's Office;

B. When tuberculosis is suspected, the contracted vendor's site medical physician will consult with the DPSCS Medical Director and obtain approval to transfer the inmate to a certified negative pressure isolation unit within DOC.

- C. When the contagious inmate is also a Psychiatric patient, the contracted vendor's physician will notify the psychiatrist and Director of Mental Health prior to placement.
- D. A nursing station will be established to ensure that nursing staff shall be in sight and sound of inmates housed in Medical Isolation beds twenty-four (24) hours a day.
- E. Daily Rounds will be conducted.
 - 1. The contracted vendor's Medical Director or designee will make daily rounds to observe changes in the inmate's health status and will treat any medical complaints.
 - 2. The Psychiatrist or designee will make daily rounds to observe changes in the inmate's mental health status and will treat any mental health problems.
 - 3. Appropriate documentation will be made in EMR or in the medical and/or mental health record if EMR is unavailable for use.
 - 4. All medical and mental health personnel will sign the tour sheet located in the infirmary subsequent to making daily rounds.
- F. The contracted vendor's Medical Director or designee will determine when the inmate is no longer contagious and will take all steps necessary to discharge the inmate from Medical isolation with a recommendation for housing assignment.

III. References:

- A. MCCS .01P
- B. ACA 4-ALDF-4C-14
- C. PDSD 130-116

IV. Rescissions: None

V. Date Issued: July 15, 2007

VI. Date Reviewed: September 28, 2009

OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 5
ISOLATION

Section 2
MAINTENANCE OF AFB (Acid Fast Bacilli) ISOLATION UNITS

I. Policy:

The Department of Public Safety and Corrections Services (DPSCS) will assure that all isolation units meet standards for care for persons with active tuberculosis or other infectious diseases requiring negative air pressure controls.

II. Procedure:

A. All isolation units will follow the following maintenance parameters:

<u>AIR HANDLING UNIT</u>	<u>FREQUENCY OF CHECKS</u>
1. Replacement of Supply Air Filters	30 days
2. Lubrication of Fan Bearings	30 days
3. Inspection/Adjustment of Fan Belts	30 days
4. Cleaning of A/C and Heating Coils	6 months
5. Cleaning of Fan Motor	30 days
EXHAUST FAN	
1. Lubrication of Fan Bearings	30 days
2. Inspection/Adjustment of Fan Belts	30 days
3. Cleaning of Fan Motor	30 days
CONTROL SYSTEM	
1. Recording of Static pressure (roof)*	1 week
2. Dirty Filter Simulation	30 days
3. Exhaust Fan Failure Simulation	30 days
4. Alarm Panel Lighting Test	30 days
5. Alarm Panel Audible Test	30 days
6. Damper Closure Test	30 days
7. Electric Relay Test	6 months
8. Control Power Supply Test/Inspection	30 days

9. Air Pressure Switch Test 30 days

GENERAL

1. Inspection of Duct and Flexible Joints 30 days
2. Inspection of Pneumatic Tubing 30 days
3. Replacement of pre-Filbert & HEPA Filter Contract
As needed
4. Cleaning of Cell Exhaust Grills* 1 week
5. Monitor all rooms, occupied or unoccupied Daily
to determine airflow is 'Into' the room, confirming that
"negative pressure" is maintained using one of the following:
 - a. Tissue Paper Test
 - b. Pressure-sensing devices (if pressure-sensing devices are
used, periodic verification by the Tissue Pressure Test is
required).

*Performed weekly, recorded monthly

Control System													
Static Pressure (roof)- performed weekly, recorded monthly													
Dirty filter simulation – 30 days													
Exhaust fan failure simulation – 30 days													
Alarm panel audible test – light display – 30 days													
Damper closure test – 30 days													
Electric relay test – 6 months													
Control Power Supply – test/inspection – 30 days													
Air Pressure switch test – 30 days													
General													
Inspection of duct and flexible joints – 30 days													
Inspection of pneumatic tubing – 30 days													
Replacement of pre- filters & HEPA filter – Contract – as needed													
HEPA filters Changed													

Maintenance Supervisor _____

Date _____

- III. References: None
- IV. Rescissions: None
- V. Date Issued: October 15, 2007
- VI. Date Revised: July 8, 2009

OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 6
FOOD HANDLER CLEARANCE

I. Policy:

Food borne infections and resulting outbreaks shall be prevented through screening the inmates that will have access to food service and food delivery according to DPSCS established procedures and in compliance with applicable laws and regulations

II. Procedure

A. All inmates identified as food service handlers shall be medically cleared by a licensed health care provider in the institution where the food handler will work during intake and whenever there is a medical issue raised regarding the infectious disease status of the inmate.

1.) Inmates with the following suspected or confirmed food borne illnesses or other potential food borne illnesses will not be cleared for food service:

- a. Hepatitis A
- b. Salmonellosis
- c. Shigella infection
- d. Campylobacteriosis
- e. Amebiasis
- f. Vibrio species infection
- g. Giardiasis
- h. Viral gastroenteritis
- i. Other enteric infections and /or non-specific diarrhea

- j. Staphylococcal skin infections/or any open sores or draining wounds
 - k. Streptococcal skin infections, MRSA
 - l. Streptococcal (Group A, Beta-hemolytic) pharyngitis
 - m. Trichinosis
 - n. Typhoid fever
- 2.) The clearance results from a medical assessment which shall include a chart review, physical inspection (e.g. hair, nails) and a brief history to identify any potential infectious diseases.
- 3.) The results of the findings shall be documented in the medical record / EMR and on the Inmate Education/Food Service Kitchen Detail form.
- 4.) The food service handler (detainee) shall be provided education on personal hygiene and a demonstration of proper hand washing by the health care provider and documentation of the education shall be placed in the individual's EMR or medical record if the EMR is unavailable.
- a. If the clinician approves the food service handler, a copy of the Inmate Education/Food Service Kitchen Detail form shall be forwarded the dietary supervisor and to the case management department.
 - b. If the clinician disapproves the food service handler, a medical referral shall be made to a physician for further evaluation and appropriate action. The dietary department will be notified by fax of the approval or disapproval on the Inmate Education/Food Service Kitchen Detail form after the physician's evaluation has been completed within 3 working days.
- B. The Food Service Supervisor provides clearance to food handlers by conducting a daily visual inspection and a health status interview prior to the food service handler beginning his/her duties each shift.
- 1.) If the visual inspection or health status interview indicates potential health problems, the food service supervisor shall notify the

medical department of the need for additional medical clearance and forward a completed copy of the Food Service Handler Interview and Evaluation Form to the medical department.

- 2.) The food service handler shall be immediately released from food handling duties until medical clearance is reinstated by the health care provider.
 - 3.) The food service supervisor shall maintain the Food Service Handler Interview and Evaluation Form on file for one year.
- C. Food service handlers with suspected or confirmed diagnoses that impact on their work assignments (e.g. shigella, Salmonella, Hepatitis A etc...) will be referred immediately to the site Infection Control Coordinator and the medical provider.
- 1.) The inmate will be medically treated for the indicated infection and medically cleared for food handling
 - 2.) DPSCS Infection Control Coordinator shall be notified and documentation of the case shall be included in CQI minutes and the monthly infectious disease report.

III. References:

- A. DCD 130-200: Infection Control Manual, Section-Prevention (Food Services Control and Sanitation); Section-Reporting
- B. COMAR 10.06.01-Communicable Diseases (reviewed date--2007)
- C. COMAR 10.16.01.09-Foodborne and Waterborne Diseases
- D. DCD 160-9, Food Service Handler Sanitation and General Orientation
- E. Maryland Commission on Correctional Standards C-3, C-4, C-5, C-8
- F. Federal Bureau of Prisons OPI: HSD/FDS 4700.05 Food Service Manual (June 2006)

IV. Rescission: DCD 130-200 Section 210: Food Handler Clearance dated October 14, 1997

V. Date issued: July 15, 2007

VI. Date Reviewed: July 14, 2009

OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 7
ECTOPARASITES

I. Policy:

Departmental inmates shall be appropriately screened and treated for ectoparasite infestations in accordance with Departmental procedures and public health standards.

II. Procedure:

A. All Department of Corrections inmates shall be screened for ectoparasite infestations in accordance with the following guidelines:

1. Inmates shall provide a medical history at the time of intake to a clinician that includes screening for ectoparasite infestations.
2. Inmates shall receive periodic medical evaluations by a clinician that include evaluation for ectoparasite infestation

B. The diagnosis of ectoparasite infestations shall be considered for any inmate presenting to medical staff with the following

1. Complaint of pruritus, worse at night
2. Small papules and vesicles around the web of fingers, umbilicus, axilla, or generalized distribution with itching
3. Generalized skin eruption of unknown etiology
4. Skin eruptions that fail to improve with repeated treatments for other dermatologic diagnoses.
5. Nits, linear burrowing, or other physical findings consistent with ectoparasite infestations.
6. Posterior cervical adenopathy.
7. Scraping of the burrow and placing the specimen under a

microscope may reveal the ectoparasitic egg, mite etc.

- C. Empiric treatment for lice infestations shall be provided for inmates at Medical intake or when it is deemed medically necessary as part of the infection control program.
1. Only nonprescription topical medications shall be utilized for the empiric treatment of lice at intake.
 2. Nonprescription topical medications shall be self-administered by inmates under the direct observation of correctional officers in accordance with a written protocol signed by the regional medical director.
 3. Correctional officer supervising the inmates' self-administration of empiric lice treatment shall be trained annually by medical staff at training schedule established with the institution's managing officer. Training shall include but not be limited to a review of written instructions for the appropriate administration and removal of topical nonprescription medication for lice.
 4. Treatment exceptions will be made for pregnant females when specific evaluation for treatment for suspected ectoparasitic infections should be under the approval of the OB specialist.
 5. Treatment of close contacts should be considered and bedding and clothes have to be removed and washed.
- D. When prescribing treatment for ectoparasite infestations, the clinician will consider the following:
1. Inmates with HIV infection and lice or uncomplicated scabies infestations should receive the same treatment as individuals without HIV infection.
 2. The recommended regimen is: Permethrin Cream (5%), Ivermectin or Lindane lotion or cream. These medications may be ordered only by a licensed clinician.
 - a. Lindane is not recommended as first-line therapy because of toxicity.
 - b. It should only be used as an alternative if the patient cannot tolerate other therapies or if other therapies have failed.

- c. Lindane should not be used following a bath and should not be prescribed to pregnant or any inmate with a disseminated body rash.
- E. Pediculosis of the eyelashes should be treated with an occlusive ophthalmic ointment rather than the routinely recommended medications for lice. Inmates with pediculosis pubis should be evaluated for other STDs.
- F. Any single case of Norwegian scabies (crusty generalized rash seen in immunosuppressed patients and elderly) and all cases of ectoparasite infestations that do not respond to initial treatment should be referred to a dermatologist or infectious disease specialist for further medical management.
- G. Inmate contacts of inmates diagnosed with ectoparasite infestations shall be evaluated in accordance with the following guidelines:
 - a. Cell mates, dormitory mates, and sexual contacts made within at least the month preceding diagnosis of the index case shall be considered at risk contacts.
 - b. All at risk contacts shall be evaluated by a clinician for consideration of empiric treatment.
 - c.. Unless otherwise contraindicated or determined to be at no risk, all evaluated contacts should be treated empirically with a standard treatment regimen for ectoparasite infestations simultaneously with the index case.
 - d. If any contact is diagnosed with an ectoparasite infestation, a secondary contact investigation shall be instituted so that tertiary contacts can be screened and treated if medically indicated.
- H. Infection Control includes the following:
 - 1. All clothing, sheets, towels or other launderable items of inmates with a diagnosis or suspected diagnosis of lice or scabies shall be bagged and sealed in laundry bags clearly marked and dated as infested laundry. Infested laundry shall be maintained in a secure area or container separately from un-infested laundry for at least five days then washed as regular un-infested laundry.
 - 2. Laundry workers handling infested laundry will routinely wear gloves and gowns.

3. Infested laundry will be disinfected simultaneously with the treatment of inmates with ectoparasite infestations in accordance with one of the following procedures:
 - a. Laundry is washed and dried at a temperature of at least 140 degrees Fahrenheit, or
 - b. Laundry is bagged and left undisturbed for five days, then processed as un-infested laundry according to routine institutional procedures.
 4. Personal belongings such as radios and toiletries of inmates with ectoparasite infestations and at risk contacts do not require individual cleaning, however, easily treatable surfaces in the cell or dormitory should be wiped down with a routine environmental cleaning agent which should include mattresses and furniture.
 5. Fumigation of cells or dormitories shall not be pursued as an infection control measure for eradicating scabies or lice.
 6. Inmates with ectoparasite infestations and at risk contacts should not be housed with new cell partners or transferred to other institutions until medically cleared.
- I. Inmates with ectoparasite infestations shall be reported in accordance with the following guidelines:
1. All cases of suspected or confirmed inmate ectoparasite infestations shall be reported to the regional infection control nurse by the health care provider making the initial diagnosis.
 2. All inmate cases of ectoparasite infestations shall be reported by the regional infection control nurse by the health care provider making the initial diagnosis
 3. If two or more cases of scabies or lice infestations are epidemiologically linked as determined by the regional infection control nurse in consultation with the Office of Inmate Health Care Services, the regional infection control nurse shall report the ectoparasite infestations as a potential outbreak to the applicable local health department in accordance with established procedures (See Reporting).
 4. The investigation and management of ectoparasite outbreaks shall be coordinated and monitored by the Division of Correction

infection control administrator in coordination with the contracted medical vendor's ID staff and ID consultant.

III. References:

- A. Eradication of Ectoparasites in Children—How to treat Infestations of lice, scabies and Chiggers.
Vol. 110/No1/July 1, 2001/Postgraduate Medicine.
- B. DCD 130-100, Section 110 Medical Intake Evaluation
- C. DCD 130-100, Section 112, Periodic Medical Evaluation
- D. DCD 130-300, Division of Correction Pharmacy Services Manual
- E. Sexually Transmitted Guidelines 2006—CDC

IV. Rescissions: DPSCSD #: 130-200-212

V. Date Issued: July 15, 2007

VI. Date Reviewed. July 2, 2009

OFFICE OF TREATMENT SERVICES
OFFICE OF INMATE HEALTH SERVICES

INFECTION CONTROL MANUAL

Chapter 8
METHECILLIN RESISTANT STAPH AUREAUS (MRSA)

I. Policy:

All inmates in DPSCS facilities who present with complaints or are observed to have open wounds, draining lesions, or signs of skin infection shall receive an evaluation and treatment for possible methicillin resistant staphylococcal infection (MRSA).

II. Procedure:

- A. All inmates with skin lesions will be seen by a nurse/PA/MD for evaluation and management.
- B. All draining wounds will be cultured for MRSA and Infection Control should be notified of all positive cultures.
- C. Housing should be assigned accordingly:
 - 1. Patients with draining wounds will be isolated in a single cell or can be housed together with other inmates with skin lesions in a designated housing area.
 - 2. Patient's with confirmed MRSA infections will be housed in a single cell or can be housed together with other inmates with confirmed MRSA infections.
 - 3. Patients with respiratory symptoms will be housed in respiratory isolation until symptoms are resolved.
 - 4. Patients with boils and furuncles are housed in their maintaining institutions as outlined above i.e. single cell or grouped medical designated housing.
 - 5. Patients with respiratory symptoms or serious infections requiring IV Antibiotics will be admitted to the infirmary and/or respiratory isolation room.

- D. Additional treatment steps include:
1. Nurse will clean wound with NS and apply non-adhesive gauze.
 2. Clinician will drain abscess and do culture and sensitivity
 3. Clinician will order Antibiotic (Directly observed therapy) as follows:
 - a. Bactrim DS po BID x 10 days or
 - b. Doxycycline 100mg po BID x 10 days for "Sulfa" allergy patients .
 - c. Vancomycin and other medication Linezolid** (Zyvox®) per C&S results and ID consultation
 4. Nurse will do daily wound dressing and write the date changed on the dressing .
 5. Clinician will admit patient with a serious infection to the infirmary for IV Vancomycin.
 6. Medical staff will monitor closely as directed by the clinician's instruction and document in the medical record/EMR as well as record new lesions or worsening of the condition.
 7. Clinician will clear patients to go to the general population when wound drainage has ceased for 24 hours and they are compliant with taking medication.
- E. Patient education will be provided by the medical staff and will include at a minimum:
1. A contractor approved MRSA Fact sheet will be provided to the patient and the information contained in that sheet will be explained to the inmate. If there are indications the inmate can not read, staff will read the sheet to the inmate and then answer any questions the inmate may have about that information.
 2. Instruction on hygiene and indications of infection or problems resulting from infections will be discussed and documented.
 3. Inmates will receive education about the proper hand washing and precautions.

4. Inmates will understand that MRSA is transmitted by direct contact through the hands of individuals who are carriers of this germ by infection or habitat. Occasionally is a respiratory disease transmission as well.
 5. Inmates will be instructed to avoid situations which may precipitate bites or break down of skin, tattoos, razor hairline edging, sharing razor blades, insect or spider bites etc.
- F. Medical staff and custody should receive education regarding MRSA and receive a MRSA fact sheet
- G. Sanitation issues include the following:
1. All staff caring for or handling materials from inmates with MRSA will wear gloves during any contact with person, bedding, or personal materials.
 2. All clothing including sheets and blankets should be bagged at the bedside and washed using hot water and detergent following OSHA guidelines.
 3. All rooms of infected inmates should be decontaminated and thoroughly cleaned prior to occupancy by other inmates with an approved cleaning solution as above.
 4. Clean shower area, toilet area after use, utilizing a solution that kills bacteria.
 5. All persons should clean wash hands after card playing, eating, weight lifting etc. Weight equipment/benches, towels regardless of presence of infection as a prevention measure.
 6. Areas that must be kept clean and sanitized include:
 - a. Day room card tables surfaces
 - b. Shower areas
 - c. Cells, prior to new inmates occupying them.
 7. Residents must be advised on how to minimize risks related to haircuts, sharing towels, hair clippers.
 8. Residents must be advised on how to minimize risks related to haircuts, sharing towels, hair clippers.

9. Laundry water temperature must be in compliance with OSHA standards to allow washed linens to be considered safe from contamination.
 10. To disinfect items and hard surfaces, a solution of bleach and water is recommended. On a daily basis, mix one ounce of bleach with ten ounces of water. A commercial disinfectant containing a hypochlorite solution (bleach) may also be used. Disinfections should be done in an area that is well ventilated. DO NOT mix bleach-containing solutions with other household disinfectants.
- H. All confirmed MRSA infections should be reported to the DPSCS Infection Control Department who will report to DOC following established guidelines.
- I. Three (3) or more confirmed MRSA from the same unit or group should be considered an outbreak and reported to the Regional Medical Director and Director of Infectious Disease DPSCS.
- J. Inmates with draining abscess should be placed on medical hold and appropriate therapy completed before transfer to other sites and have:
1. No restriction to family or court visits, unless ordered by the clinician.
 2. No work assignments until cleared by the clinician.
 3. Recreation equipment and telephone wiped after use with a clean dry towel or bleach solution wipe.

III. References:

- A. Bureau of Prison Clinical Practice Guidelines for Management of MRSA
- B. DPSCSD 130-100 Medical Intake
- C. Maryland Department of Health and Mental Hygiene Epidemiology and Disease control guide line for control of MRSA in long term care facility
- D. Center for Disease Control and Prevention (CDC)
[HTTP://www.cdc.gov/neidod/hip/aregist/mrsafag.htm](http://www.cdc.gov/neidod/hip/aregist/mrsafag.htm)

IV. Rescissions: None

V. Date Issued: July 15, 2007

VI. Date Reviewed: July 14, 2009