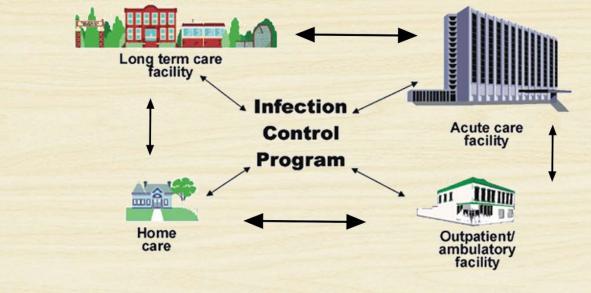


### Mission

The Statewide Program for Infection Control and Epidemiology promotes prevention and control of healthcare-associated infections in North Carolina and beyond by providing evidence-based education and consultation across the healthcare spectrum.



"Patients deserve effective infection Prevention wherever they receive healthcare."



Adapted from: Jarvis WR Emerg Infect Dis. 2001;7:170-3. Macedo de Olivera et al. Annals of Int Med. 2005, 11



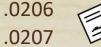


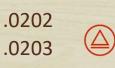
North Carolina Laws Concerning Infection Prevention and Control



# **Objectives**

10 A NCAC 41A





.0214 GS 130A-135 10A NCAC 41A

15A NCAC 13B .1200

- Describe North Carolina State Laws governing infection prevention in healthcare facilities
- Discuss Control Measures for Human Immunodeficiency Virus (HIV), hepatitis B and hepatitis C
- Review Communicable Disease Reporting
- Describe NC Medical waste rules.



B



### History

- 1990 CDC becomes aware of a possible transmission of HIV from a dentist to 6 patients (Kimberly Bergalis case)
- July 1991 CDC publishes Recommendations for Preventing Transmission of HIV and hepatitis B Virus to Patients During Exposure-Prone Invasive Procedures



- October 1991 Congress passes Public Law 102-141, requiring states to adopt CDC Guidelines or equivalent guidelines drafted by the state
- July 6<sup>th</sup>, 2012 CDC Updated Recommendations for Management of Hepatitis B Virus-Infected Health-Care Providers and Students



## History

### HIV and hepatitis B Infected HCP



- <u>All healthcare providers who perform or assist in:</u>
  - Surgical OR
  - Obstetrical OR
  - Dental procedures
- And who know themselves to be infected with HIV or Hepatitis B shall notify the NC State Health Director
- No requirement to notify employer



# History



### **HIV and hepatitis B Infected HCP**

### Once notification occurs:

Health Director is responsible to:

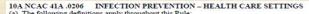
- Investigate provider's practice
- Evaluate clinical condition
- Determine risk of transmission to patients
- Convene expert panel

### **Expert Panel shall:**

- Review evidence
- Hear testimony from provider and/or their physician
- Make recommendations related to restrictions and identification of potentially exposed patients



### **History** 10A NCAC 41A .0206





10A NCAC 41A.0206 Infection Prevention-**Healthcare Settings** 

- (a) The following definitions apply throughout this Rule:
   (1) "Health care organization" means a hospital; clinic; physician, dentist, podiatrist, optometrist, or chiropractic office; home care agency; nursing home; local health department; community health center; mental health facility; hospice; ambulatory surgical facility; urgent care center; emergency room; Emergency Medical Service (EMS) agency; pharmacies where a health practitioner offers clinical services; or any other organization that provides clinical care.
  - "Invasive procedure" means entry into tissues, cavities, or organs or repair of traumatic injuries. The term includes the use of needles to puncture skin, vaginal and cesarean deliveries, surgery, and dental (2)procedures during which bleeding occurs or the potential for bleeding exists.

 (3) "Non-contiguous" means not physically connected.
 (b) In order to prevent transmission of HIV, hepatitis B, hepatitis C and other bloodborne pathogens each health care
 organization that performs invasive procedures shall implement a written infection control policy. The health care organization shall ensure that health care workers in its employ or who have staff privileges are trained in the principles of infection control and the practices required by the policy; require and monitor compliance with the policy; and update the policy as needed to prevent transmission of HIV, hepatitis B, hepatitis C and other bloodborne pathogens. The health care organization shall designate one on-site staff member for each noncontiguous facility to direct these activities. The designated staff member in each health care facility shall complete a course in infection control approved by the Department. The Department shall approve a course that addresses:

- (1) Epidemiologic principles of infectious disease;
- (2) Principles and practice of asepsis;
- (3) Sterilization, disinfection, and sanitation;
- (4) Universal blood and body fluid precautions;
- (5) Safe injection practices: (6)

(7)

- Engineering controls to reduce the risk of sharp injuries;
- Disposal of sharps; and Techniques that reduce the risk of sharp injuries to health care workers.

(8) (c) The infection control policy required by this Rule shall address the following components that are necessary to prevent transmission of HIV, hepatitis B, hepatitis C and other bloodborne pathogens:

- Sterilization and disinfection, including a schedule for maintenance and microbiologic monitoring of (1) equipment; the policy shall require documentation of maintenance and monitoring;
- (2)
- (3) (4)
- Sanitation of rooms and equipment, including cleaning procedures, agents, and schedules; Accessibility of infection control devices and supplies; and Procedures to be followed in implementing 10A NCAC 41A. 0.002(4) and .0203(b)(4) when a health care provider or a patient has an exposure to blood or other body fluids of another person in a manner that poses a significant risk of transmission of HIV or hepatitis B.

(d) Health care workers and emergency responders shall, with all patients, follow Centers for Disease Control and Prevention Guidelines on blood and body fluid precautions incorporated by reference in 10A NCAC 41A .0201. (e) Health care workers who have exudative lesions or weeping dermatitis shall refrain from handling patient care equipment and devices used in performing invasive procedures and from all direct patient care that involves the potential for contact of the patient, equipment, or devices with the lesion or dermatitis until the condition resolves. (f) All equipment used to puncture skin, mucous membranes, or other tissues in medical, dental, or other settings must be disposed of in accordance with 15A NCAC 13B .1200 after use or sterilized prior to reuse

History Note: Authority G.S. 130A-144; 130A-145; 130A-147; Eff. October 1, 1992; Amended Eff. January 1, 2010; December 1, 2003; July 1, 1994; January 4, 1994.



### History



Each **healthcare organization** in which **invasive procedures** are performed must:



 Implement a written infection control policy addressing components necessary to prevent transmission of HIV, hepatitis B, hepatitis C and other bloodborne pathogens



 Designate one on-site staff member to direct infection control activities





*Video Clip: Start the video by clicking on the play button.* 



### Definitions



### "Healthcare organization" means:

- Hospital
- Clinic
- Physician Practice
- Dentist
- Podiatrist
- Optometrist, or
- Chiropractic office

- Home care agency
- Nursing Home
- Local health department
- Community health center
- Mental health facility
- Hospice
- Ambulatory surgical facility

- Urgent care center
- Emergency room
- Emergency medical service (EMS) agency
- Pharmacies where a health practitioner offers clinical services

Or any other organization that provides clinical care



# Definitions

"Invasive procedure" means entry into tissues, cavities or organs or repair of traumatic injuries.

This includes:

- Use of needles to puncture skin
- Vaginal and cesarean deliveries
- Surgery
- Dental procedures during which bleeding occurs or the potential for bleeding exists



### **Infection control policy**



Infection control policy must include and address the following components necessary to prevent transmission of HIV, hepatitis B, hepatitis C and other bloodborne pathogens:

- Disinfection and Sterilization
- Maintenance and microbiologic monitoring of equipment
- Sanitation of rooms and equipment
  - Cleaning procedures, agents used and schedules
- Accessibility of infection control devices and supplies
  - Personal protective equipment (PPE), safety sharps, etc.
- A post-exposure follow-up program





# Designated staff member

Designated staff member must complete a State approved course in infection prevention

- Course curriculum developed by SPICE
- SPICE has oversight of course
- Course faculty must submit an application and be approved by SPICE prior to offering the course
- On the job training is not sufficient and "Train the Trainer" concept cannot be used
- Upon completion of course will receive a certificate of completion
  - Serves as documentation of compliance with rule .0206









### **Approved course must include:**

- Epidemiologic principles of infectious disease
- Principles and practice of asepsis
- Sterilization, disinfection, and sanitation
- Universal blood and body fluid precautions (Standard Precautions)

- Safe injection practices
- Engineering controls to reduce the risk of sharp injuries
- Disposal of sharps
- Techniques that reduce the risk of sharp injuries to health care workers



### 10A NCAC 41A .0206: 2010 Amendment

- Safe Injection Practices has been added to list of topics covered in state-approved course
- Hepatitis C and other bloodborne pathogens are addressed, in addition to HIV and HBV
- One designated trained staff member is required for each noncontiguous healthcare facility
  - Non contiguous: when facilities are not physically connected to each other.
- OSHA bloodborne pathogen training, alone, does not include all of the elements required under .0206



### .0206 Legal requirements

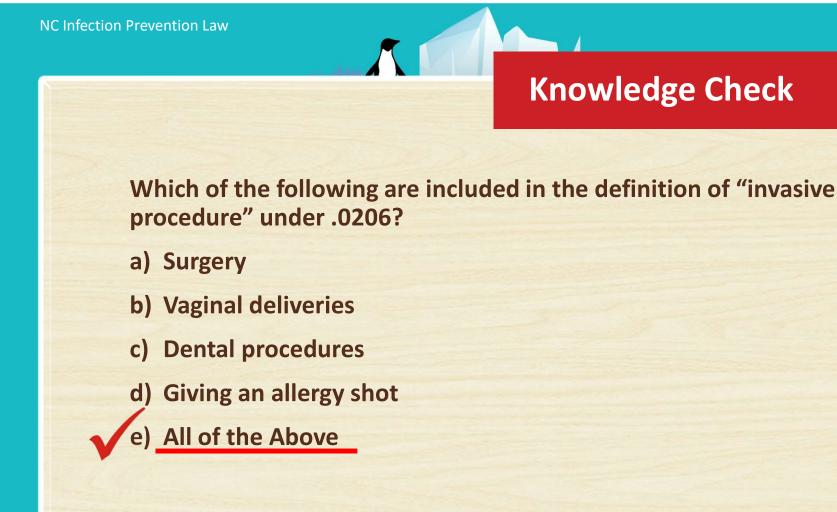




Healthcare providers with exudative lesions or dermatitis on hands/wrists shall refrain from:

- Handling patient care equipment
- Handling devices used for invasive procedures
- All direct care activities likely to have contact with lesion







### **Knowledge Check**

False

### **True or False?**

Rule .0206 requires all of the following for healthcare organizations:

Have a written infection control policy

- Conduct infection control training for healthcare providers
- Have at least one person designated to have oversight of infection control
- Designated person must attend a state-approved course
- Compliance with infection control requirements must be monitored

# Objectives

### 10 A NCAC 41A

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.0202 .0203

GS 130A-135 10A NCAC 41A 15A NCAC 13B .1200 • Describe North Carolina State Laws governing infection prevention in healthcare facilities

• Discuss Control Measures for Human Immunodeficiency Virus (HIV), hepatitis B and hepatitis C

Review Communicable Disease Reporting

• Describe NC Medical waste rules.



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### **Control measures HIV, HBV, HCV**

### 10A NCAC 41A .0202, .0203, and .0214

### **3 Key Steps**

- 1. Determining the risk
- 2. Following up on the source
- 3. Maintaining confidentiality



# Modules

# Determine if exposure to the person constitutes a significant risk

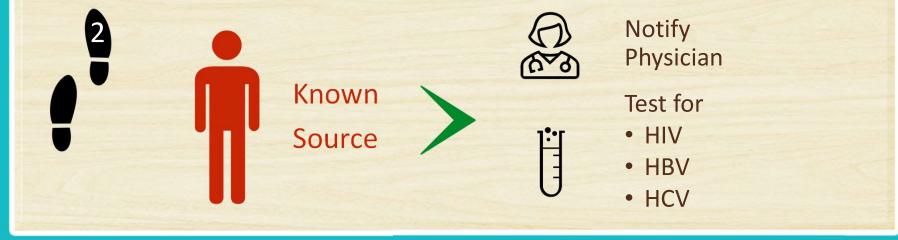
- Needlestick most common
- For all other exposures (splashes and splatters for example) evaluate:
  - The amount and type of body fluid
  - Potential pathogen and
  - The route of exposure (mucous membranes, nonintact skin for example)



# **Control measures HIV, HBV, HCV**

### Follow up on the source of the exposure:

• If source is known, notify their physician, test for HIV, HBV and HCV (unless already known to be infected) and offer follow up as appropriate.

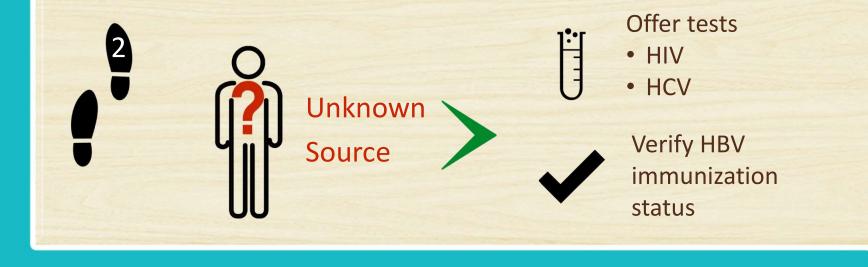




# **Control measures HIV, HBV, HCV**

### Follow up on the source of the exposure:

If source unknown: offer HIV testing to exposed person, verify status of HBV vaccination and offer HCV testing





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# **Control measures HIV, HBV, HCV**

### Maintain Confidentiality

- Protect confidentiality of known source person and their testing status
- Exposed person instructed to maintain confidentiality
- Disclosures for communicable disease reporting are protected and do not violate HIPAA regulations





### **Knowledge Check**

False

**True or False:** 

Needlesticks are the most common route of exposure to

bloodborne pathogens in the healthcare setting



# **Objectives**







• Describe North Carolina State Laws governing infection prevention in healthcare facilities

• Discuss Control Measures for Human Immunodeficiency Virus (HIV), hepatitis B and hepatitis C

GS 130A-135 10A NCAC 41A

15A NCAC 13B .1200 Review Communicable Disease Reporting

• Describe NC Medical waste rules.



B



### **Reporting rules:**



### GS 130A-135; 10A NCAC 41A

- "A physician licensed to practice medicine who has reason to suspect that a person about whom the physician has been consulted professionally has a communicable disease (CD) or condition declared by the Commission to be reported, shall report information required by the Commission to the local health director ..."
- Physicians, labs & specified others must report CDs designated "reportable" by NC Commission for Public Health

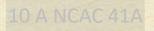
https://epi.publichealth.nc.gov/cd/report.html



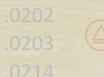
CHAPTER 41 - EPIDEMIOLOGY HEALTH	
CHAFTER 41 - EFIDEMIOLOGT HEALTH	
SUBCHAPTER 41A - COMMUNICABLE DISEASE CONTROL	
SECTION AND COMMINICANE DISEASE CONTROL	
SECTION .0100 - COMMUNICABLE DISEASE CONTROL	
10A NCAC 41A .0101 REPORTABLE DISEASES AND CONDITIONS	
(a) The following named diseases and conditions are declared to be dangerous to the public health and are hereby	
made reportable within the time period specified after the disease or condition is reasonably suspected to exist:	
<ol> <li>acquired immune deficiency syndrome (AIDS) - 24 hours;</li> </ol>	
<li>(2) anthrax - immediately;</li>	
<li>(3) botulism - immediately;</li>	
<li>brucellosis - 7 days;</li>	
<li>(5) campylobacter infection - 24 hours;</li>	
(6) Candida auris - 24 hours;	
<ul><li>(7) Carbapenem-Resistant Enterobacteriaceae (CRE) – 24 hours;</li></ul>	
(8) chaneroid - 24 hours:	
<li>(9) chikungunya virus infection - 24 hours;</li>	
<li>(10) chlamydial infection (laboratory confirmed) - 7 days;</li>	
(11) cholera - 24 hours;	
<li>(12) Creutzfeldt-Jakob disease – 7 days;</li>	
<ul> <li>(13) cryptosporidiosis – 24 hours;</li> </ul>	
<ul> <li>(14) cyclosporiasis – 24 hours;</li> <li>(15) log 2 log 2 log 2</li> </ul>	
(15) dengue - 7 days;	
<ul> <li>(16) diphtheria - 24 hours;</li> <li>(17) Eachairt bia chia can baia and bai</li></ul>	
<ul> <li>(17) Escherichia coli, shiga toxin-producing - 24 hours;</li> <li>(18) ehrlichiosis - 7 days;</li> </ul>	
(1A) enflictiosis – / davs:	



# **Objectives**







GS 130A-135

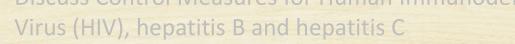
**15A NCAC** 

13B.1200

**10A NCAC 41A** 



Describe North Carolina State Laws governing infection



- Review Communicable Disease Reporting
- Describe NC Medical waste rules.



(B)



# **NC Medical Waste Rules**

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### 15A NCAC 13B .1200

The NC Medical Waste Rules:

- Define types of medical waste
- Outline how medical waste should be packaged
- Dictates how medical waste should be stored and transported and
- Outlines methods of treatment and disposal

Rules are periodically updated

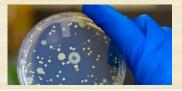


# **NC Medical Waste Rules**



### Medical waste

- Any solid waste generat 15 AnNCAG
  - Diagnosis
  - treatment, or
  - immunization of human beings or animals
- Disposed of in the county landfill and no treatment necessary prior to disposal



Currently Two Typ

Regulated medical waste

atment

idual containers

*'age* 

ion, steam

Pathological waste...incineration/ozonation

treatment

•



# Not Defined as Regulated Medical Waste under 15A NCAC 13B .1200:



### Sharps

- Rules do not require treatment before disposal
- <u>Must be packaged in a container that is</u> rigid, leak-proof when upright, and puncture resistant
- Shall not be compacted prior to off-site transportation
- Can be disposed of with general solid waste
  - Some landfills do not accept sharps

### **Miscellaneous Items**

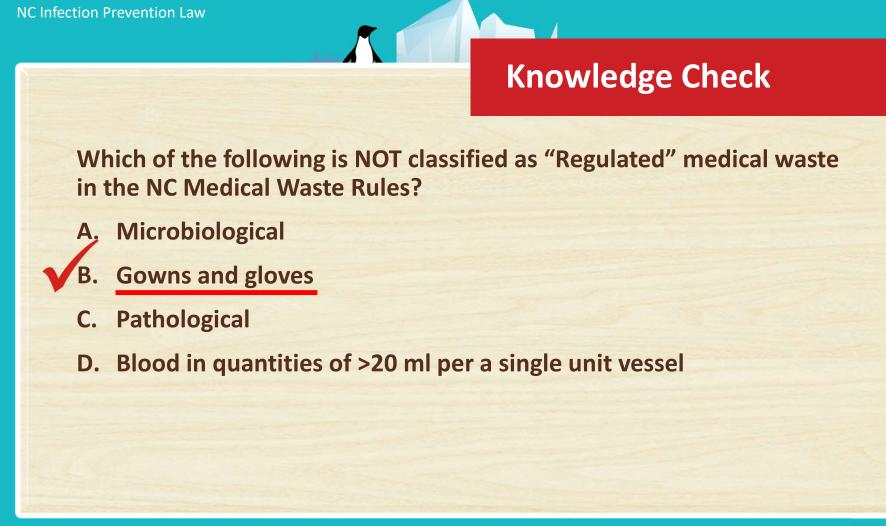
- Dressings ar , bandages (even blood soaked), songes, disposable instruments, used gloves, and tubing
  - Disposed of as general solid waste

uding injections

e is not included in

Household wa administered medical wastered







### **Knowledge Check**

What do the NC Medical Waste Rules require for disposal of sharps?

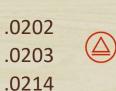
- A. Container for sharps is rigid, puncture resistant and leak proof when in an upright position.
- B. Closed sharps container may be disposed of with general solid waste.
- C. Contained sharps shall not be compacted prior to off-site transportation.
- D. All of the above



# **Objectives**

### 10 A NCAC 41A

.0206



GS 130A-135

**15A NCAC** 

13B.1200

**10A NCAC 41A** 

- Describe North Carolina State Laws governing infection prevention in healthcare facilities
  - Discuss Control Measures for Human Immunodeficiency Virus (HIV), hepatitis B and hepatitis C
  - Review Communicable Disease Reporting
  - Describe NC Medical waste rules.



B











