

North Carolina Department Of Health and Human Services

Ashley R. Bredenberg

June 17- August 9, 2013



About Me...

- 3rd Year Veterinary Student
 - St. George's University, Grenada
- National SAVMA
 - Global and Public Health Officer-Elect 2013
- Pet Photography



North Carolina Department of Health and Human Services

- Background and Function
- Products
- Activities
- Competencies

North Carolina Department of Health and Human Services

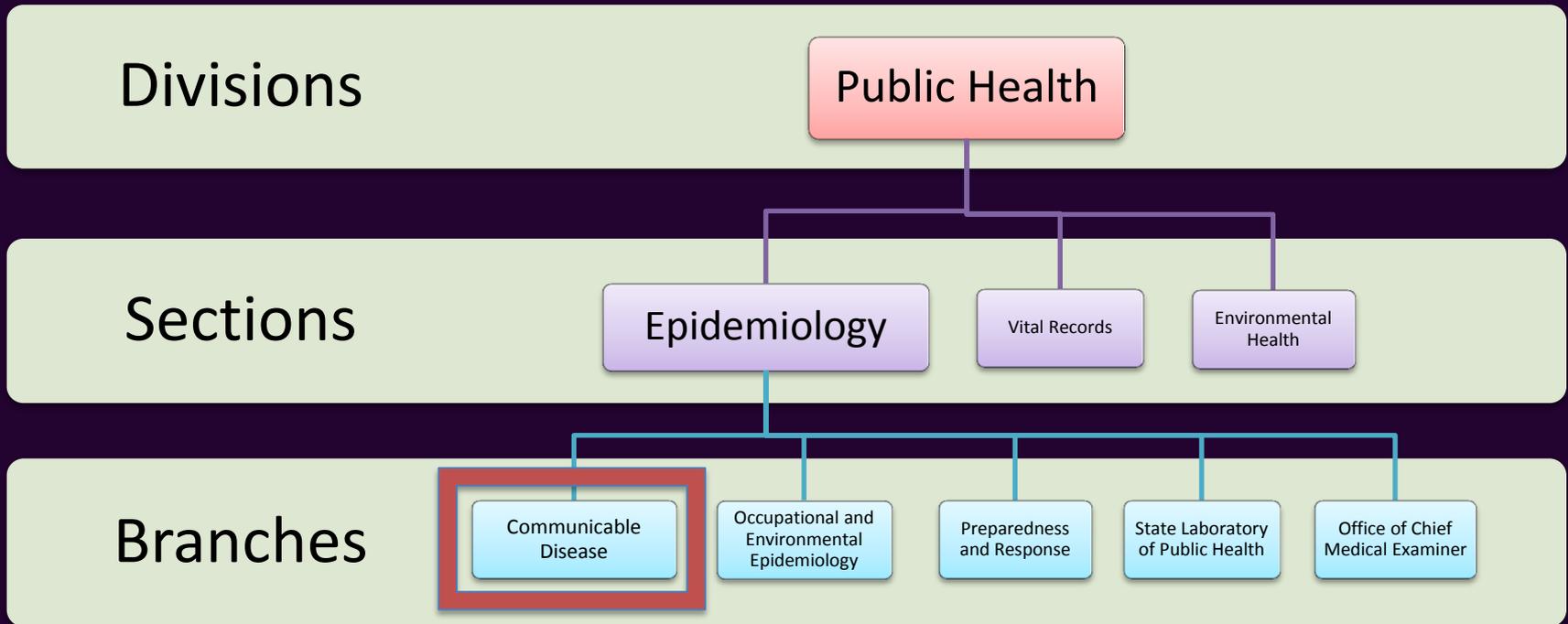
- Executive Organization Act of 1971
- Raleigh, North Carolina
- Protect the health and safety of all North Carolinians while providing essential human services in collaboration with their many partners and affiliations

Mentor

- Dr. Marilyn Goss Haskell
 - DVM - University of Florida
 - MPH - Medical College of Virginia
- Public Health Veterinarian and Epidemiologist



North Carolina Department of Health and Human Services



Communicable Disease Branch

- Downtown Raleigh
- Home Rule State
 - 86 Autonomous Local Health Departments
- Medical Consultation Unit
- Surveillance
- HIPAA



Surveillance

- North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT)
 - Unique to North Carolina
 - Real-Time Surveillance
 - International Classification of Diseases (ICD)
 - Emergency Departments / Urgent Care
 - Carolinas Poison Control Centers
- Earlier event detection than with reporting alone



Surveillance

- North Carolina Electronic Disease Surveillance System (NC EDSS)
 - CDC Initiative to move to electronic based surveillance
 - Reporting to State
 - Reporting to CDC
 - De- Identified Information
 - IT

Products Developed

- Animals in Public Settings North Carolina Guidance Document
- Staying Safe Around Dogs
- Rabies Sample Submission Questionnaire
- Public Health Practice
- Journal of Activities

Animals in Public Settings North Carolina

- Original Product:
 - Update existing Animals in Schools
- Recent NC Events
 - Aedins Law 2005
 - Exhibition regulation and permit requirements
 - 2011
- Change in need for the document

Animals in Public Settings North Carolina

ANIMALS IN PUBLIC SETTINGS NORTH CAROLINA GUIDE

INTRODUCTION

This guide is designed to provide a quick reference to resources for North Carolina animal exhibitors and operators of multiple animal venues to assist in creating healthy and safe environments for the public to interact with animals. Human contact with animals and animal excrements (urine, feces, saliva, birthing fluids, etc.) may be associated with zoonotic disease transmission. Zoonotic diseases are infectious diseases transmitted from vertebrate animals to humans. Young children, the elderly and immune-compromised persons are especially susceptible.

susceptible.

humans. Young children, the elderly and immune-compromised persons are especially

transmission. Zoonotic diseases are infections transmitted from vertebrate animals to

Animals in Public Settings North Carolina

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- 2 – PETTING ZOOS
- 3 – EDUCATIONAL FARMS AND AGRITOURISM
- 4 – SCHOOL SETTINGS
- 5 – PET STORES, FEED STORES, REPTILE AND EXOTIC ANIMAL EXHIBITS
- 6 – RESTAURANTS
- 7 – SERVICE ANIMALS

2 | ANIMALS IN PUBLIC SETTINGS

- Laws, Codes, Regulations
- Authoritative Guidance
- Contacts
- Venues

Animals in Public Settings North Carolina

SECTION A – LAWS, CODES AND REGULATIONS

- i. [North Carolina General Statutes, Table of Contents](#)
- ii. [North Carolina Rabies Control Laws](#)
 - I. [§ 130A-185 - Vaccination required, Rabies.](#)
 - II. [§ 130A-193 - Vaccination and confinement of animals brought into North Carolina, Rabies.](#)
- iii. [Agriculture Chapter 106, Agricultural societies and Fairs Article 45](#)
 - I. [§ 106-516 to § 106-519 - Vendors, Exhibitors and Licensing.](#)
 - II. [§ 106-520.1 - Definition of 'fair'](#)
 - III. [§ 106-520.3A - Animal exhibition regulation; permit required; civil penalties. \(Aedin's Law\)](#)
 - 1. [2005 Original General Assembly Senate Bill 258 - Aedin's Law](#)
- iv. [North Carolina Administrative Code, Table of Contents](#)
- v. [Agriculture and Consumer Services - Title 02](#)
 - I. [Chapter 52, Veterinary](#)
 - 1. [NCAC 52B .0212 Importation Requirements - Wild Animals](#)
 - 2. [NCAC 52K .0101-.0702 - Animal Exhibitions](#)
 - II. [Health and Human Services - Title 10A](#)
 - I. [Chapter 41, Epidemiology Health](#)
 - 1. [NCAC 41A.0303 - Sale of Turtles Restricted](#)
 - 2. [NCAC 41A.0303 - Recording the Sale of Birds](#)
 - 3. [NCAC 41G .0101-.0103 - Rabies](#)
 - III. [Environment and Natural Resources](#)
 - I. [Chapter 18, Environmental Health](#)
 - 1. [NCAC 18A .2056 - Physical Facilities](#)
- vi. [Federal Code of Regulations, USDA, Animal Welfare Act](#)
 - a. [Animal Welfare Act as of February 1, 2010 \(PDF | 122 KB\)](#)
 - b. [Animal Welfare Regulations \(PDF | 463 KB\)](#)
 - c. [APHIS Animal Care Program, Animal Welfare Homepage](#)
 - I. [Licensing Information](#)
 - II. [Licensing Application KB](#)
- vii. [Local Ordinances in North Carolina](#)

ANIMALS IN PUBLIC SETTINGS 3

- Hyperlinked
- Benefits
 - Broad
 - Guides the User
 - Organization

Animals in Public Settings North Carolina

SECTION B – OTHER GUIDANCE AND COMPENDIA	
i.	Centers for Disease Control – Morbidity and Mortality Weekly Report, Compendia of Measures to Prevent Disease Associated with Animals in Public Settings, by the National Association of State Public Health Veterinarians.
ii.	North Carolina Rabies Public Health Program Manual
iii.	Centers for Disease Control – Healthy Pets Healthy People
iv.	Compendium of Animal Rabies Prevention and Control, 2011 by National Association of State Public Health Veterinarians.
v.	USDA Animal Care Policy

SECTION C - CONTACTS	
i.	NC DHHS Veterinary Public Health 919-733-9419
ii.	North Carolina Health Departments by County
iii.	NC Department of Agriculture and Consumer Services, Veterinary Division 919-733-7601
iv.	APHIS United States Department of Agriculture, Animal Welfare

SECTION D - VENUES	
VENUE 1 – FAIRS	
i.	Please see Appendices A and B of Compendia of Measures to Prevent Disease Associated with Animals in Public Settings 2011.
ii.	Tips from the CDC to prevent illness when visiting animal exhibits. Stay Healthy at Animal Exhibits this Summer
iii.	Animal Contact Exhibit Information from the North Carolina Department of Agriculture & Consumer Services
iv.	MMWR State Fair – E. Coli
v.	North Carolina MMWR State Fair Outbreak of E. Coli 2011
vi.	The State Fair Study Commission initiated changes in pedestrian and animal traffic patterns that are designed to reduce health risks.
vii.	H3N2 Swine Flu Factsheet –Centers for Disease Control
viii.	Downloadable signage from the North Carolina Department of Agriculture and Consumer Services

4 ANIMALS IN PUBLIC SETTINGS

- Problems:
 - PDF on Website
 - Cannot directly link to NCAC
- Update Constantly

Animals in Public Settings North Carolina

- Venues Refer Back

VENUE 2 - PETTING ZOOS

- i. Please see Appendices A and B of [Compendia of Measures to Prevent Disease Associated with Animals in Public Settings 2011](#).
- ii. [Animal Contact Exhibit](#) information from the North Carolina Department of Agriculture & Consumer Services
- iii. Do I need a permit for my petting zoo? See the [Flowchart](#) from the North Carolina Department of Agriculture & Consumer Services
- iv. [2004 Report of Shiga toxin producing E. coli infections associated with a petting zoo at the North Carolina State Fair](#)
- v. [Downloadable signage](#) from the North Carolina Department of Agriculture and Consumer Services

VENUE 3 - EDUCATIONAL FARMS AND AGRITOURISM

- i. So you want to Start an Agritourism Farm? [Start here](#).
- ii. [Agritourism guidance](#) by North Carolina Department of Agriculture and Consumer Services
- iii. Is Agritourism right for you? [Factsheet](#) by North Carolina State University, Cooperative Extension
- iv. [Downloadable signage](#) from the North Carolina Department of Agriculture and Consumer Services

VENUE 4 - SCHOOL SETTINGS

- i. Please see Appendices D of [Compendia of Measures to Prevent Disease Associated with Animals in Public Settings 2011](#)
- ii. [National Science Teachers Association position statement](#) on the responsible use of live animals and dissection in the science classroom.
- iii. [National Association of Biology Teachers position statement](#) on the use of animals in biology education.
- iv. [Rabies and Kids](#), Centers for Disease Control

VENUE 5 - PET STORES, FEED STORES, REPTILE AND EXOTIC ANIMAL EXHIBITORS

- i. Exotic Animals
 - a. [Administrative Code 02 NCAC 52B .0212 Importation Requirements: Wild Animals](#)
 - b. [Auctions, USDA License](#)

Animals in Public Settings North Carolina

- c. Animal Care, USDA Exhibit Animal Species
- ii. USDA APHIS Animal Welfare Act, Retail Pet Store Rule
- iii. Some animals are not recommended as pets because of the health risk to young children. Please use caution when handling these animals
- a. Poultry
 - i. Risks of Salmonella from live baby poultry, CDC
 - ii. North Carolina Department of Agriculture & Consumer Services, Veterinary Division Letter to Pet Stores encouraging protection of public health.
- b. Reptiles and Amphibians
 - i. CDC's Recommendations on Reptiles and Amphibians
 - ii. Pet Turtles - FDA Consumer Health Information
 - iii. North Carolina Turtle Code

VENUE 6 - RESTAURANTS

- i. Animals are often in public, but how should they be handled in restaurants? Please see the [North Carolina Food Code Manual](#) for more information. (See manual page 178, section 6-501.115, Prohibiting animals.)
- ii. Administrative Code – 15A NCAC 18A .2656, Physical Facilities, Rules Governing the Food Protection and Sanitation of Food Establishments, September 2012
- iii. Please also see [Section 7](#) about Service animals.

VENUE 7 - SERVICE ANIMALS

- i. Under the Americans with Disabilities Act published by the Department of Justice, "entities must permit service animals to accompany people with disabilities in all areas where members of the public are allowed to go". Please See [ADA 2010 Revised Requirements - Service Animals](#).
- ii. Here are some commonly asked questions about service animals in places of business. [ADA Q and A - Service Animal Access](#).
- iii. A service animal may accompany persons with disabilities. North Carolina General Statutes [North Carolina General Statutes § 168-4.2](#).
- iv. North Carolina Requires a service animal to be registered, [Application for service animal registration](#).

- Changes:
 - Add Allergy Section
 - Add summary for each Section
 - Compendia 2013

Staying Safe Around Dogs



- Created to prevent dog bites in children
- Children (boys) ages 5-9
- End of the School year
- Given by LHD Nurses or Animal Control Officers

Staying Safe Around Dogs

- FUN

11/12/13

When Should We Pet Dogs?

- This dog is eating.
- Should we pet her?
- **STAY AWAY** and come back later.



Say It Again, Please...

- **STAY AWAY** when dogs are chewing on Bones or eating food.



Staying Safe Around Dogs

- Obstacles in Photography



Staying Safe Around Dogs

11/12/13

Smart Students WAIT!

- W = WAIT
- A = ASK
- I = INTEREST ?
- T

• NO INTEREST = STAY AWAY



Smart Students WAIT!

- W = WAIT
- A = ASK
- I = INTEREST ?
- T = TOUCH



9

- Recommendations of the American Veterinary Medical Association

Staying Safe Around Dogs

11/12/13

What if an Animal Knocks Me
Down?



Protect Yourself



11

- Included approach by a dog
- Knocked down
- Protection

Staying Safe Around Dogs

Staying Safe Around Dogs

As the CDC states, "Nearly 4.5 Million Americans are bitten by dogs each year, half of these are children."¹ This lesson is intended to educate children at highest risk of dog bites (ages 5-9)¹ about safety and appropriate interaction around dogs. It is recommended to give this presentation toward the end of the school year, a time when more children will be outdoors, and risk of exposure is greater. AVMA

It is recommended to engage your audience throughout the presentation. Ways to do this are ask general Yes/No questions, and take surveys by having the students raise their hands. Don't be afraid to repeat yourself, and most importantly, have fun.

Slides :

1. TITLE SLIDE

- Introduce yourself!
- It is almost summertime! That means we will be doing more things outside!
- I am here today to teach you about dogs and how to stay safe around them.

2. DOGS DOGS DOGS

- Raise your hand if you have a dog at home.
- (you may also ask silly questions to engage them)
- Who has a Brown dog? Who has a big dog?

3. DOGS CAN BE GREAT FRIENDS

- Raise your hand if you have friends, we all have friends!
- Dogs can be great friends, but
- Any dog can bite, even the ones at home, so we must learn how to stay safe around them
- Friends do things like play, run and laugh together.
- We might enjoy those things, but dogs may not understand, and be scared.

4. WHAT DOGS LIKE AND DON'T LIKE

- Now let's talk about things that dogs LIKE.
- What do dogs like? (ambiguous audience chatter)
- Dogs like soft, smooth, touch.
 - Some dogs may not like it if we pet them on the head.
 - Stand beside the dog and make long, smooth and soft strokes down their back in the same direction as their fur
- And dogs DON'T like Hugs. Did you know dogs don't like hugs?

5. WHAT DOGS LIKE AND DON'T LIKE

- Dogs really like inside voices. Dogs also like compliments. Did you know dogs like compliments? ("you look so very handsome today spide!")
- Dogs DON'T like yelling or screaming, it hurts their ears, and they might be scared.

6. WHEN SHOULD WE PET A DOG?

- Sometimes we might want to pet our dog, he might be busy.
- Should we pet a dog that is busy chewing on a bone? NO!
- Should we pet a dog that is busy eating? How about sleeping? NO!
 - Do NOT pet a dog that is busy chewing on a bone or eating food, they might think we are trying to take it.
- We should STAY AWAY for now, and come back later.

- Script / Guide for presenter

- Re-work

- More Interactive
- Q and A session
- Include Cats

Rabies Sample Submission Questionnaire

- Submitter
- Positive Cases
- General Information about the exposure

Rabies Sample Submission Questionnaire

A. Person being interviewed or completing the questionnaire:

Title (check one): Owner's veterinarian Wildlife officer agency: _____
 Shelter veterinarian/staff Other (specify: _____)
 Animal control officer agency: _____

B. Did the submitter have an established relationship with the animal and client prior to onset of symptoms?
 Yes (please go to C) No (please go to D)

If yes then answer C. If no then skip to question D.

C. Approximately how many times had you seen the patient prior to onset of symptoms?
 Did not see prior to onset of symptoms
 1 to 3 times
 3 to 5 times
 6 to 10 times
 More than 10 times

D. Animal info (circle or fill in the blank):

D1. Species:
 Dog Cat Horse Cow Other (specify: _____)

D2. Sex:
 Male Female

D3. Status:
 Spayed/neutered
 Intact

D4. Approximate age (years): _____
 Less than 1 year old
 1 to < 2 years old
 2 to < 4 years old
 4 to < 6 years old
 6 years old or more

E. Housing:
 Indoors Outdoors Indoor/outdoor mix Unknown

County/city and state residing in or found in:
County/City: _____ State: _____

Rabies Sample Submission Questionnaire

- Behavioral
- Central Nervous System Signs
- Digestive
- Other

F. Rabies vaccination history (please write in 'unknowns' where information is unavailable).

Date (mm/dd/yyyy)	Product (3 yr / 1 yr)	Manufacturer

G. Description of illness:
 First sign of illness: _____ Onset date: _____

H. Other signs of illness:

	Increase	Decrease	None/ No change	D/K	If increase or decrease, then enter number days prior to death
1. Behavioral					
a. aggressiveness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
b. lack of awareness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
c. lethargy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
d. sleep pattern	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
e. jumpiness/nervousness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
f. irritability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
g. vocalization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
h. licking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
i. other (specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
2. Central nervous system					
a. abnormal eye movement/nystagmus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
b. seizures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
c. weakness (parosia/paralysis)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
d. head tilt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
e. shaking or tremors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
f. circling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
g. ataxia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
h. other (specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
3. Digestive					
a. vomiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
b. diarrhea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
c. lack of appetite/ not eating (anorexia)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
d. not drinking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
e. trouble swallowing/ dysphagia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
f. dropped jaw and/or protruding tongue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ days
4. Other					
a. fever	Yes <input type="checkbox"/>	No <input type="checkbox"/>	_____ days		
b. other (specify: _____)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	_____ days		

Rabies Sample Submission Questionnaire

- Additions:
- Veterinarian Information
- Ownership Status
- Type of Exposure
- Feral Cat Management in County

Initials _____ Lab ID # _____

Rabies Sample Submission Questionnaire

A. Person being interviewed or completing the questionnaire:

Name(s): _____

Owner's Veterinarian
Practice: _____
Phone: _____

Shelter Veterinarian/staff

Animal Control Officer - Agency: _____

Wildlife Officer - Agency: _____

Caretaker (if feral or stray)

Owner

Other (specify: _____)

B. Did the submitter have an established relationship with the animal and client prior to onset of symptoms?

Yes (please go to C)

No (please skip to D)

C. Approximately how many times had you seen the patient prior to onset of symptoms?

Did not see prior to onset of symptoms

1 to 3 times

3 to 5 times

6 to 10 times

More than 10 times

D. Animal information (circle or fill in the blank):

D1. Species:

Dog

Cat

Horse

Cow

Other (specify: _____)

D2. Sex:

Male

Female

Unknown

D3. Status:

Spayed/Neutered

Intact

Unknown

D4. Approximate age (years):

Less than 1 year old

1 to < 2 years old

2 to < 4 years old

4 to < 6 years old

6 years old or more

Unknown

D5. Ownership Status:

Owned

Feral

Stray

Managed Colony Member

Unknown

E. Housing:

Indoors

Outdoors

Indoor/outdoor mix

Unknown

F. County/city and state of residence or capture:

County/City: _____ State: _____

H. Does the county of animal residence/capture have a local Feral Cat Management Ordinance?

Yes

No

Unknown

I. Were there human exposures to this animal?

Did the animal bite?

No

Scratch

Handling

Unknown

Other (specify: _____)

Describe: _____

J. Has the animal ever been vaccinated against Rabies?

Yes (Please fill in J1)

No

Unknown

Public Health Practice

- Short Summary
- Public Health Practice

Public Health Practice at North Carolina Department of Health and Human Services, Division of Public Health, Communicable Disease Branch

Ashley R. Bredenberg

My field experience at the North Carolina Department of Health and Human Services Division of Public Health Communicable Disease Branch was exceptionally informative and educational, with a vast array of experiences and opportunities.

Public Health practice is a collaborative effort and cannot be characterized by a single branch or organization. The NC Division of Public Health (DPH) is a pool of expertise across many disciplines and backgrounds, which makes for a diverse and knowledgeable team. Cooperation and communication among divisions, sections and branches in the organizational tree of the Department of Health and Human Services makes an intricate and fluid system well equipped to support the state's public health needs.

North Carolina's public health system is focused at the county level. Each county has a local health director who is the administrative head of the local health department, and performs public health duties under the supervision of the local board of health and the Department. Local health departments are assisted and supported by the state Department of Health and Human Services in accordance with NC general statute. Communicable diseases, reportable conditions and public health events are reported to and investigated by the local health director and his or her staff.

The Communicable Disease Branch (CDB) serves the entire state through on-call support (24/7) in the areas of rabies and communicable diseases. Many of the communicable disease calls come from the county communicable disease nurses and local health directors, while many of the rabies calls come from County Animal Control officers and veterinarians requesting clarification of the state rabies laws and guidance. The lines are always open to the public for medical consultation;

Journal

- Log of Activities
- Things to look up!
- Contacts
- HIPAA



Activities

- Rabies On-Call
- Communicable Disease On-Call
- Conference Calls for Outbreak Investigations
- State Laboratory for Public Health
- Rollins Laboratory for Animal Diseases
- Wake County Food Inspection
- HIV Bridge Counseling
- USDA National Poultry Improvement Plan
- Occupational and Environmental Epidemiology Branch
- Orange County Animal Services

Rabies On-call

- Veterinary Public Health Program
- 24/7 Support
 - Local Health Departments
 - Healthcare Providers
 - Veterinarians
 - State Agencies
 - Public
- Rabies Public Health Program Manual - Online
- Algorithm publication
 - High vs. Low risk animals



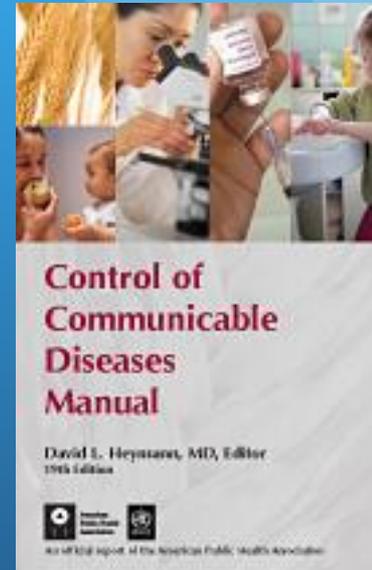
Communicable Disease On-call

- Similar in Support
 - Hospital Acquired Infection
 - Vaccine-Preventable Disease
 - Sexually Transmitted Disease
 - Foodborne Disease
 - Potential Bioterrorism Agent Reporting



Communicable Disease On-Call

- Conference Calls
- Outbreak Investigations
 - Legionnaire's outbreak in a hospital
 - Carbapenem-resistant Enterobacteriaceae outbreak in a long-term care facility
 - Bat Infestation and exclusion situation within a state mental health facility
 - Wildlife Resource Commission
 - ILDH



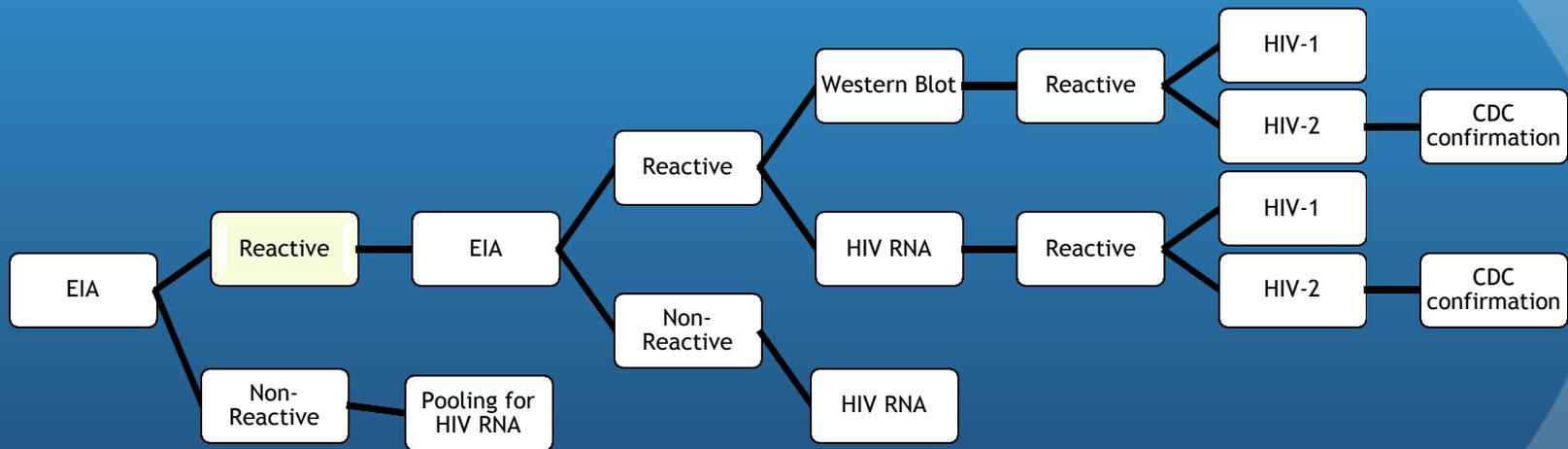
State Laboratory for Public Health



- Rabies Testing
- HIV Testing

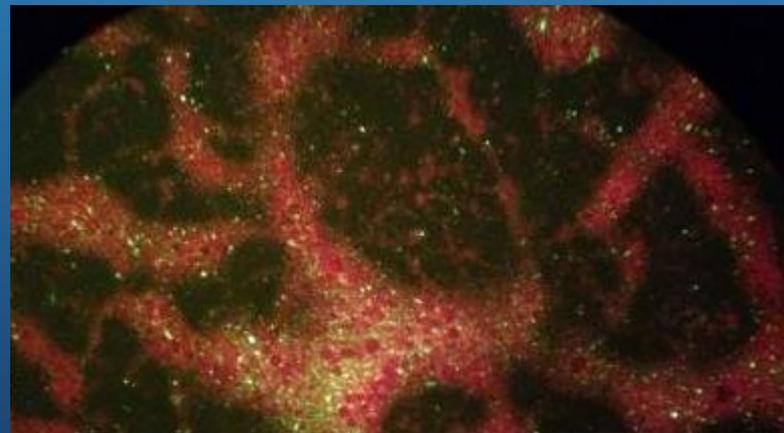
SLPH - HIV Testing

Enzyme Immunosorbent Assay (EIA)



SLPH - Rabies Testing

- Ordered By Risk
- Direct Fluorescent Antibody (DFA)
- Variant Typing
- Indefinitely stored
- Positives sent to CDC



Rollins Laboratory for Animal Diseases



Rollins Laboratory for Animal Diseases

- North Carolina Department of Agriculture and Consumer Services
- Veterinary Diagnostic Laboratory System
- Reportable Disease List - State Veterinarian
- BSL-3 Laboratory Facilities
- Necropsy Services - public

Rollins Laboratory for Animal Diseases



USDA APHIS



- National Poultry Improvement Plan
- Establishes standards for poultry breeding stock and hatchery products, and certifies that poultry are free from egg transmitted and hatchery disseminated diseases:

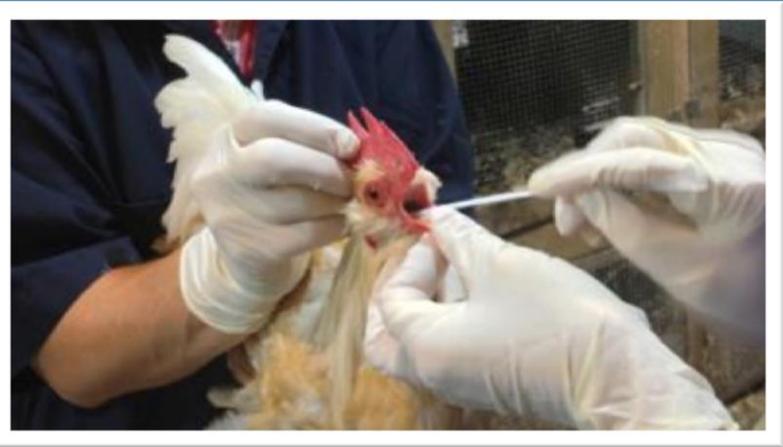
- *Salmonella pullorum*
- *Salmonella gallinarum*
- Avian Mycoplasmas
- *Salmonella enterica*
- Avian Influenza



National Poultry Improvement Plan



- Backyard vs Commercial
- Quarterly
 - Pullorum
 - Avian Influenza

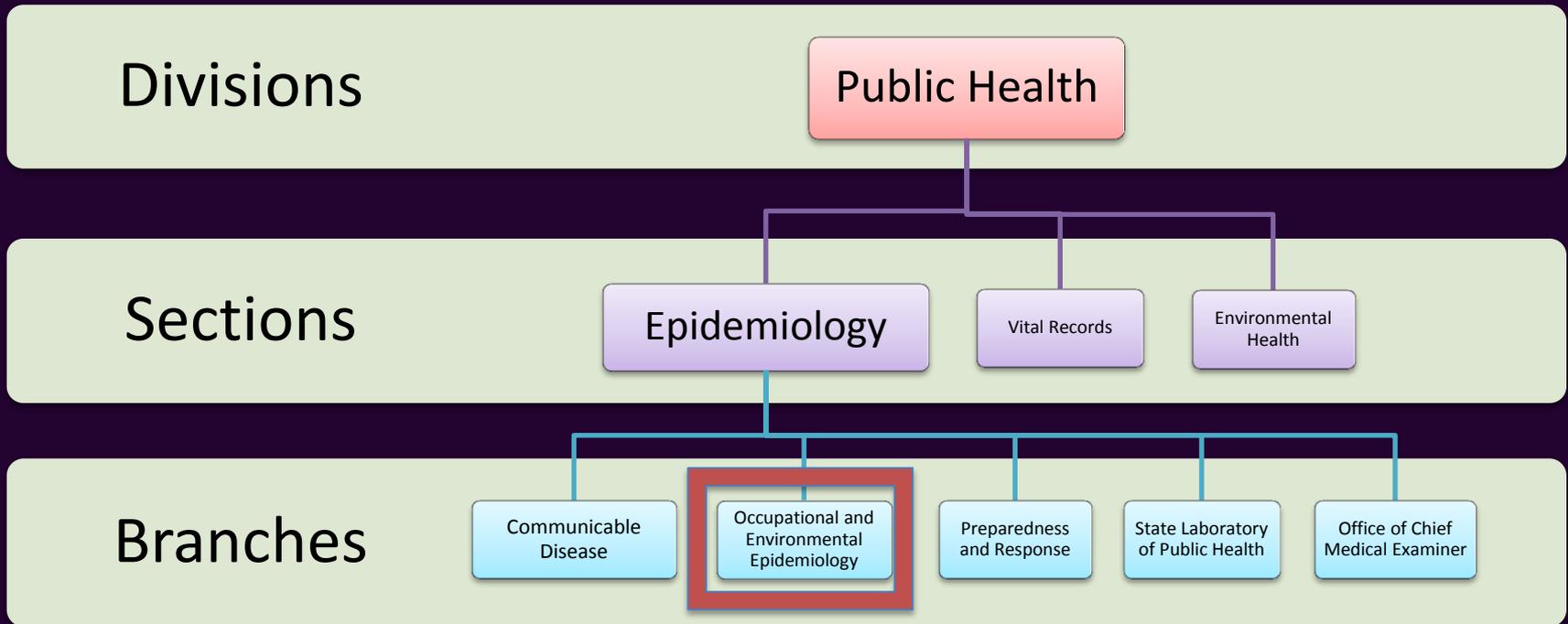


Occupational and Environmental Epidemiology

- Epidemiology Branch
- Industrial Hygienist On-call
 - MOLD -No acceptable Level
 - Risk Analysis - N95 Masks
- Bioterrorism Meeting
 - CDC case definition, treatment
- De-briefing industrial CO poisoning

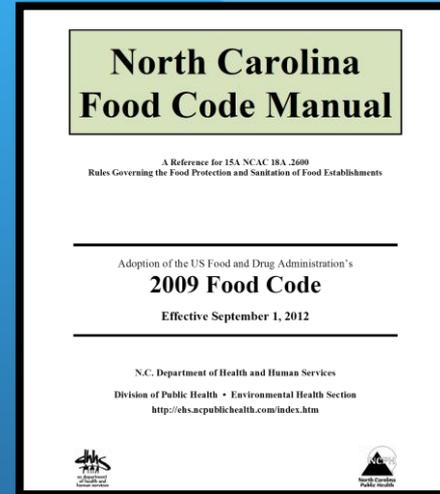


North Carolina Department of Health and Human Services



Wake County Environmental Services

- Food Inspection
 - 3 Team Leaders
 - 17 Field Inspectors
 - Report to LHD
- Addendum
- Most outbreak investigations -
 - Employee handling or illness



HIV Bridge Counseling

- Viral Suppression
- NOT a notifier
- Loss of care
 - 9 months or longer
- Identification
- Line list



County Animal Shelter



Animal Services



- Uphold Ordinances
- Enforce Civil Penalties



Core Competencies

- Pathogens / Pathogenic Mechanisms
- Host Response to Pathogens
- Environmental / Ecological Influences
- Disease Surveillance
- Effective Communication

