

Town Hall Meeting

North Carolina

National Bio and Agro-Defense Facility
(NBAF)

Moderator:
Mr. Frank Stasio
Host of “The State of Things”
WUNC Public Radio



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Welcome to the NBAF Town Hall Meeting

- **Meeting Objective**

- Answer Your Questions on the NBAF

- **Meeting Format**

- **Presentation (7:00 – 7:30 p.m.)**

- Presentation by the NBAF Program Manager and subject matter experts.

- **Questions and Answers (7:30 – 9:00 p.m.)**

- Written questions will be sorted by topic by independent facilitators and asked by the moderator.

- **Open Microphone (9:00 – 10:00 p.m.)**

- Time permitting, attendees can come to the microphone and ask a question that has not been covered.



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Welcoming Remarks

Mayor Tom Lane
Butner, NC



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Team Introduction

- **Jamie Johnson**, DHS, Director of National Laboratories, NBAF Program Manager
- **Dr. Tammy Beckham**, USDA APHIS, Director, Foreign Animal Disease Diagnostic Laboratory, National Veterinary Services Laboratories
- **Eugene Cole**, DHS, Office of National Laboratories, Registered Architect
- **Dr. Larry Barrett**, DHS, Director, Plum Island Animal Disease Center (PIADC)



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What can I expect to see in the draft EIS?

- **The proposed scope and content of the draft NBAF EIS will consist of:**
 - Description of the proposed facility
 - Description of the research to be conducted
 - Information on the design, construction and operation
 - Description of the environment at each of the six site alternatives
 - Detailed analyses of the potential environmental and human health impacts of locating and operating the facility at each of the six site alternatives



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What are the goals of the NBAF?

- Develop countermeasures such as vaccines and anti-viral therapies for foreign animal diseases.
- Provide advanced test and evaluation capability to detect foreign animal and zoonotic diseases (diseases transmitted from animal to humans).
- Conduct basic and applied research on high threat foreign animal diseases.
- Train veterinarians.



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What would we study in the NBAF?

- The NBAF would **not** study anthrax, Ebola, plague or smallpox.
- The mission of the NBAF is to study animal infectious diseases that threaten our agricultural livestock and agricultural economy.
 - Nipah Virus
 - Hendra Virus
 - African Swine Fever
 - Rift Valley Fever
 - Japanese Encephalitis Virus
 - Foot and Mouth Disease
 - Classical Swine Fever
 - Contagious Bovine Pleuropneumonia
- Zoonotic diseases would be studied and diagnosed in livestock.



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Why is DHS responsible for the NBAF?

What is the role of USDA?

- DHS has the responsibility for detecting, preventing, protecting against and responding to terrorist attacks within the U.S.
 - Transferred ownership of PIADC from USDA to DHS in 2003.
 - PIADC has historically conducted much of the research that would be conducted at the NBAF.
- DHS' responsibilities, as applied to the defense of animal agriculture, are shared with USDA.
 - Requires a coordinated strategy to adequately protect the Nation against biological threats to animal agriculture.



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NBAF is Not a Bioweapons Facility

- The development of bioweapons was outlawed by the 1972 Biological Weapons Convention (BWC), and the United States is a party to this agreement.
- PIADC mission would continue at the NBAF – research, diagnosis and vaccine development.



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What would the NBAF look like?

- DHS completed a feasibility study, which is not site specific. Detailed design would commence if and when a site is selected.
- Conceptual NBAF layouts for each site will be in the draft NBAF EIS.
- The following pictures are of other biocontainment laboratories that have similar security requirements.



CDC Emerging Infectious Diseases Laboratory



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Canadian Science Center for Human and Animal Health



USDA High Containment Large Animal Facility



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Would the NBAF research be conducted in secret?

- There would be no classified research, but occasionally the NBAF could support classified FBI forensic investigations.
- Just as at PIADC, research at the NBAF would be published in publicly available scientific journals.



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Would the local community be considered for any jobs?

- A total of about 250 to 350 employees would be employed at the NBAF, many from the local community.
 - Positions include researchers, laboratory animal technicians, animal caretakers, laboratory technicians, custodial staff and administrative staff.
 - Employees currently working at PIADC would be given the opportunity to move to the NBAF if a site other than Plum Island is selected.



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Would DHS be open to community input?

- DHS would provide updates to the community on the design and construction progress.
- Once the NBAF was operational, community forums would be held just as DHS does for PIADC.
 - The community forum would give local officials opportunities to tour the facility and meet with lab directors.
- DHS and USDA would collaborate with the local university, government and industry laboratories.



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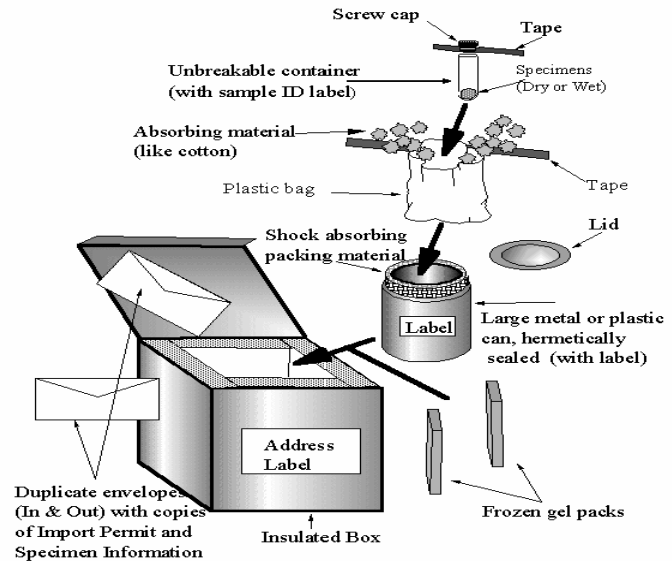


How would USDA/DHS respond if there is a release?

- Veterinarians are trained in the recognition of foreign animal diseases. These veterinarians are called Foreign Animal Disease Diagnosticians.
- Foreign Animal Disease Diagnosticians are trained in working with local and state veterinarians, as well as the USDA APHIS in appropriate response to a potential foreign animal disease outbreak.
 - Potential responses would include quarantine, shipment of samples to the NBAF or National Animal Health Laboratory Network for testing.



Safe Specimen Packaging and Transport



■ Packaging

- Must meet the standards set by the national ground transport regulations and the International Air Transport Association.
- Packaging can withstand a drop of 27 feet.
- Packaging is waterproof.
- All packages are clearly marked to specify their contents.



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Train Veterinarians In Recognizing Foreign Animal Diseases (FAD)

- At PIADC, APHIS holds 4-6 FAD training classes per year.
- Participation is from the State Department, DoD, USDA, and State Diagnostic Labs.
- One of the best “hands on” FAD courses in the world!



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Research Versus Diagnostics

- Research at the NBAF would be performed on the eight pathogens listed previously.
- Diagnostic testing would be performed on a larger number of agents from clinical samples, import/export testing and product samples.
- Ensure United States maintains disease-free status.
 - Help diagnose entry of foreign animal and/or zoonotic disease rapidly.
 - Rapid diagnosis key to control of a disease.
 - Protect the Nation's economy.




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REPORT SUSPECTED CASES OF FOOT-AND-MOUTH DISEASE

To the nearest Veterinarian
or Livestock Official



FOOT SYMPTOMS:
Blisters between toes
Lameness
Swelling of feet
Pain about the shoes

**It's Intensely Infectious
and Easily Carried on
Hood, Shoes, Clothing
and many other ways**

MOUTH SYMPTOMS:
Blisters on lips and tongue
Blow salivae
Smelling of mouth
Pain when eating

OTHER SYMPTOMS:
Rapid loss of flesh
Reduced milk flow
Reduced output
Blisters on teats
Loss of appetite
Chills and fever
DEATH MAY FOLLOW

YOUR DUTY:
Confine sick animals.
Stop all visiting.
Tie dogs; pen fowls, etc.
Report case at once!

This pestilence of cattle, swine, sheep, etc., causes enormous losses, and must be suppressed at once!

Send for Farmers' Bulletin on "Foot-and-Mouth Disease"

**United States
Department of Agriculture**

Some things never change – the best way to control a FAD is to keep it out!

If not out – to diagnose it ASAP!

Keep Foot-and-Mouth Disease OUT of America

Remember to declare any visits to farms or contact with livestock.

Remember to declare all food and agricultural items in your possession on your Customs form.

Failure to do so could result in a fine of up to \$1,000.



U.S. Department of Agriculture
Animal and Plant Health Inspection Service

Program APL 91-1004 - Issued March 2001

The U.S. Department of Agriculture is an equal opportunity provider and employer.

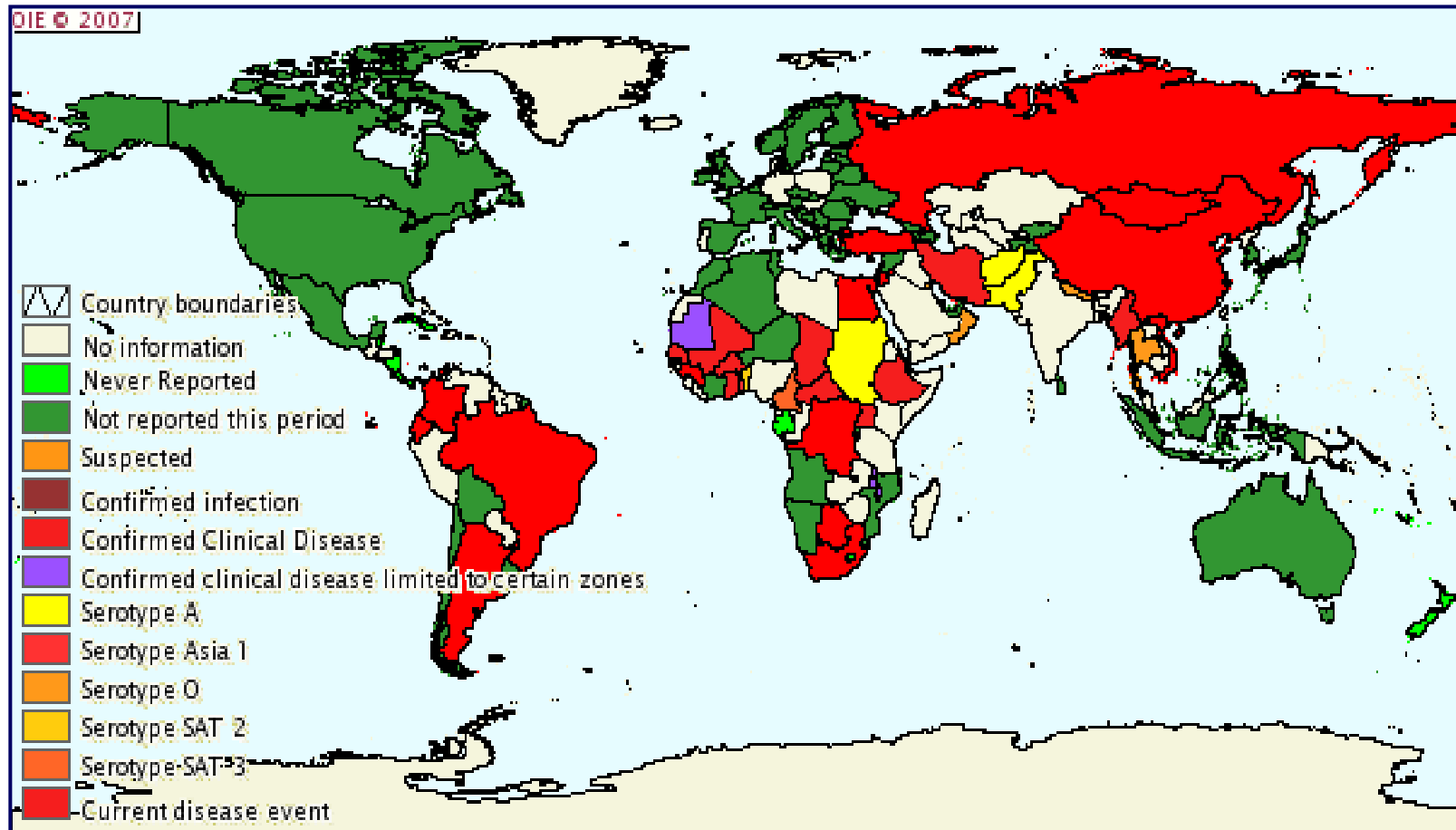


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Foot and Mouth Disease (FMD)

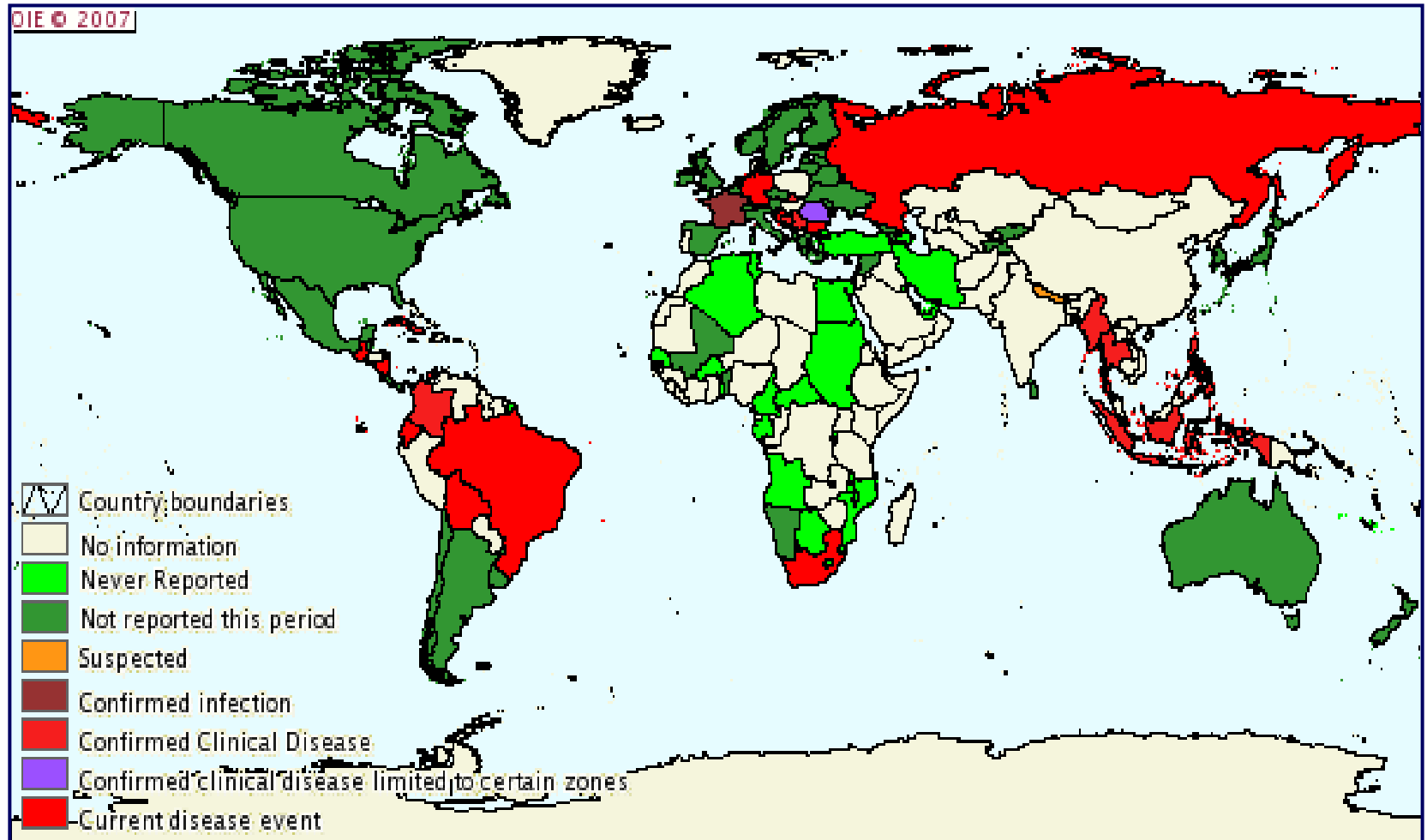
Distribution (July-Dec 2006)



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Classical Swine Fever Distribution (July-Dec 2006)

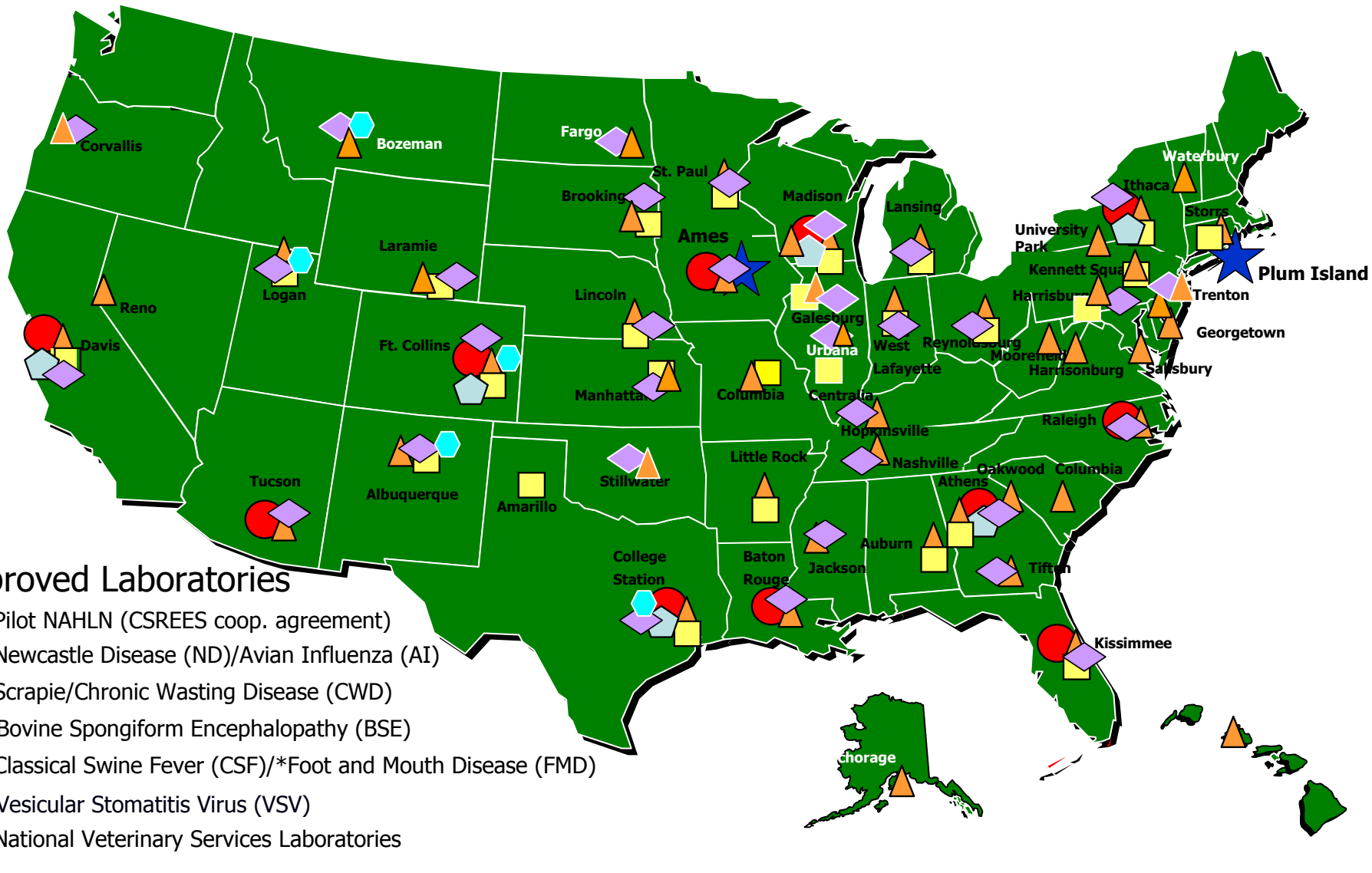


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National Animal Health Laboratory Network (NAHLN)

Purpose: early detection, rapid response, appropriate recovery



*For specified agents, not all laboratories are currently participating in surveillance testing.

August 1, 2007

Would the NBAF be safe?

- Safety and security for the NBAF would be based on USDA and CDC regulations and guidance for biocontainment.
 - Redundant safety and security.
 - Dedicated supply and exhaust, vacuum and decontamination systems.
- A variety of available proven technologies would be considered for use in the NBAF design. The EIS will address the potential impacts of the available technologies.
 - All waste would be treated prior to release.
 - All air would be filtered prior to release.



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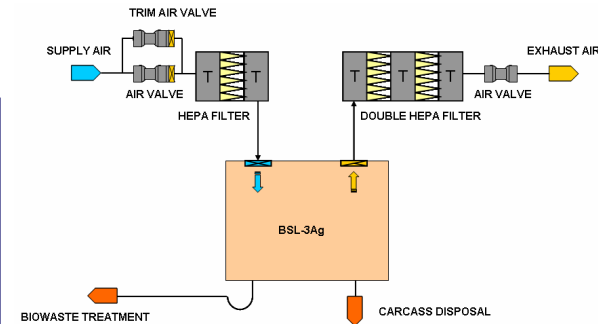


Biosafety Levels – Facility Requirements

- BSL-1 – Classroom laboratories.
- BSL-2 – Medical and veterinary schools, research institutions and hospitals.
 - Open bench-top, sink for hand washing required, autoclave available.
- BSL-3 – State and federal public health and animal health laboratories and research institutions.
 - BSL-2 plus: physical separation from access corridors, self-closing, double-door access, exhaust air is not recirculated, negative airflow into lab, back-up redundant systems.
- BSL-4 – Currently there are four facilities operating in the United States in populated urban areas.
 - BSL-3 plus: separate building or isolated zone, dedicated supply and exhaust, vacuum, and decontamination systems, other requirements outlined by NIH and CDC.

Engineering and Building Features of the NBAF

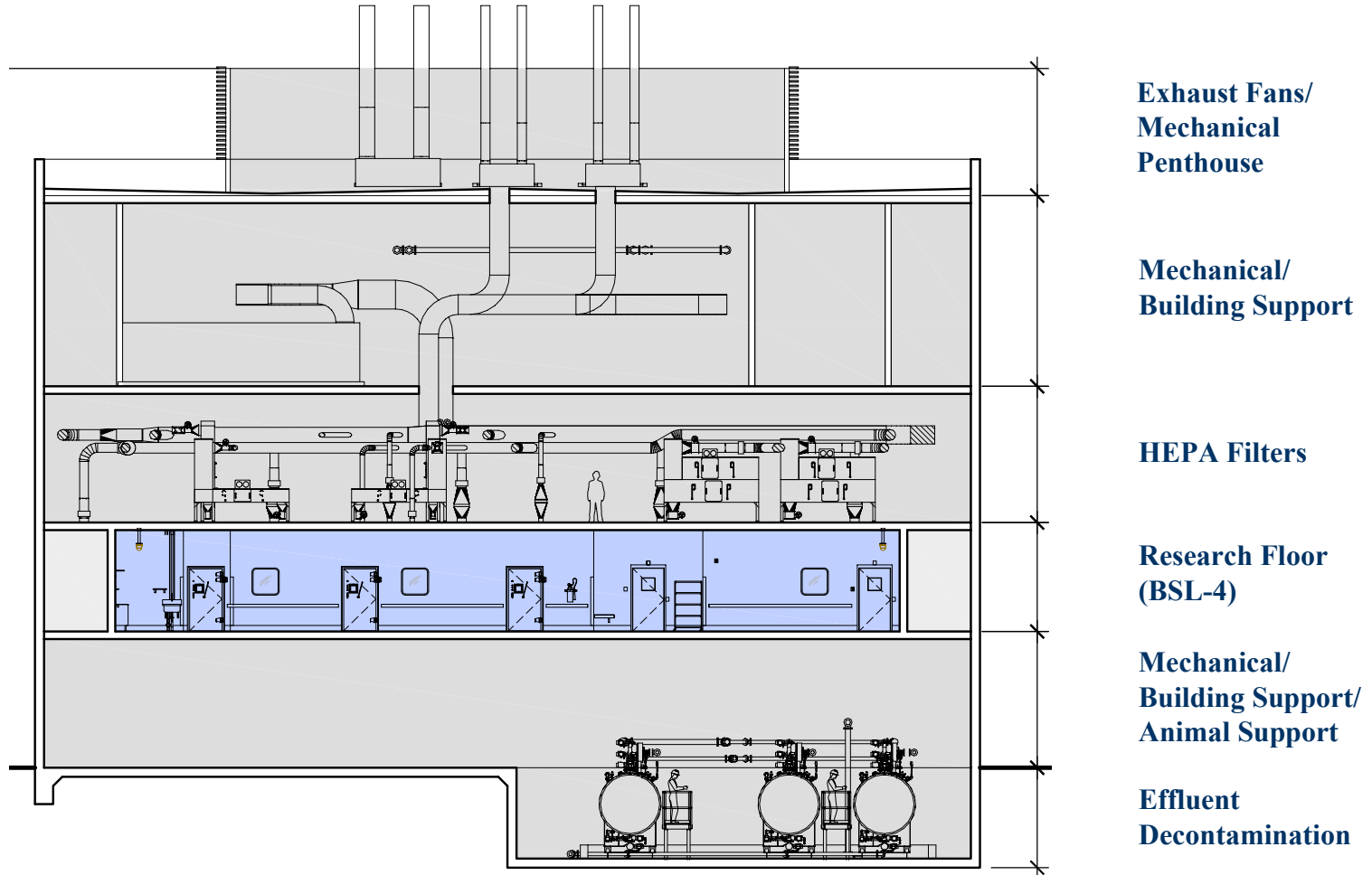
- Physical security
 - Dual perimeter fencing
 - Electronic access control
 - Closed circuit TV surveillance
 - Identification tagging
- Building design
 - “Box in a box” construction
 - Interlocking doors
 - Zoned heating, ventilation and air conditioning systems
 - HEPA filtration, bio-seal dampers
- Personnel security
 - Personnel screening and training



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TYPICAL STACKING DIAGRAMS – BSL-3Ag & BSL-4



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Your Questions Are Important

- We are here to answer questions on the NBAF.
- We will return for public meetings after the draft NBAF EIS is published in the spring.



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