

# **BIOSECURITY FOR PREVENTION OF FOOT & MOUTH DISEASE**

## **Policy for the NCSU College of Veterinary Medicine**

Prepared by the CVM Infectious Disease Control Committee

June 21, 2005

In response to the Foot & Mouth Disease (FMD) outbreaks worldwide, visitors to the NCSU College of Veterinary Medicine (CVM) and the students, staff, and faculty of the CVM must take steps to help prevent the accidental introduction of the disease into this country. Humans can carry the virus on their clothing, shoes, body (particularly the throat and nasal passages) and personal items. The disease is extremely contagious and spreads easily among cloven-hoofed animals such as cattle, sheep, pigs, goats and deer. For this reason, the policies listed below will be enforced at the CVM for anyone who has visited a FMD infected area.

### **I. TRAVEL ABROAD: FACULTY, STAFF, STUDENTS, AND CVM VISITORS:**

All CVM personnel (faculty, staff, and students) and visitors to the CVM returning after a visit within the past 14 days to any foreign country where Foot & Mouth Disease is known to be present must take the following actions before entering any CVM facility.

1. All clothes worn while visiting a farm, during exposure to livestock, or worn where cloven hoofed animals are present (eg, sheep, deer, cattle, pigs), must be soaked in 100% vinegar solution, followed by laundering all clothes in hot water (hot wash cycle on washing machine). The virus is susceptible to strong acids and bases.
2. Bathe and shampoo hair thoroughly after returning from travel.
3. Dispose of all shoes worn in the foreign country. Cleaning alone may not remove the virus.
4. Returning travelers should be restricted for 14 days after their return from a foreign country from contact with any areas in which livestock (cattle, horses, sheep, swine, goats, llamas, etc.) are housed or examined at the CVM.
5. Tours of the CVM, (for example school tours, visiting groups, etc.) must register with the CVM Student Services office. The office of Student Services is located in Room A-242 of the CVM or may be contacted at phone number 919-513-6205. The Student Services office will be educated on the College's Policy on Foot & Mouth Disease so that they can appropriately inform tour groups. Tours must not include areas of the CVM where cloven-hoofed animals are housed or examined.

## II. TRAVEL ABROAD – CVM CLIENTS

1. Any client bringing an animal to the CVM will be informed of the CVM Policy for Prevention of Foot & Mouth Disease. They may be informed by way of a sign posted at the entrance, a brochure provided for them when their animal is admitted for examination, or personal interview.
2. The VTH Admission Information form that is completed when an animal owner visits the VTH or arranges an appointment by phone, should include a check-off in which they are asked, “Have you visited a foreign country in the past 14 days?” And, “If the answer is yes, please list the country or countries visited.” If the second part of this question is completed, the VTH Admission desk should have available a list of foreign countries where Foot & Mouth Disease is known to exist. If the client has visited one of these countries listed, restrictions listed below will apply.
3. If the client has recently visited a country in which Foot & Mouth Disease is known to exist, they will not be allowed to enter areas of the VTH where livestock (cattle, horses, sheep, swine, goats, llamas, etc.) are housed or examined at the CVM for 14 days after their visit to a foreign country. They should receive some educational materials (brochure, pamphlet) and/or consultation from clinician or the hospital’s epidemiologist to explain the reasons for such a restriction.
4. The animal(s) owned by a client that has visited a foreign country within the past 14 days will not be admitted to the CVM hospital unless there is an exception by the College’s Epidemiologist.

### III **WARNINGS POSTED AND SIGNAGE:**

Signage stating the above precautions, and restrictions will be placed at each public entrance to the CVM, including the Veterinary Teaching Hospital and Teaching Animal Unit. The signs should state:

IF YOU HAVE TRAVELED OUTSIDE THE U.S. IN THE PAST FOURTEEN (14) DAYS WHERE FOOT AND MOUTH DISEASE IS PRESENT, YOU MAY INADVERTENTLY BE CARRYING AN INFECTIOUS DISEASE. PLEASE REPORT FIRST TO THE FRONT DESK OF THE VETERINARY TEACHING HOSPITAL OR THE DEAN'S OFFICE (Room A-233, Phone 919-513-6786).

The Teaching Hospital front desk personnel should be familiar with the policies in section II above, and immediately contact the following personnel in the listed order of priority. If the first person on the list is not available, contact the next listing, and so on. The contacted person will determine the course of action based on CVM Policies.

1. Dr. Jay Levine, CVM Epidemiologist, Room B-337, Phone (919) 513-6397
2. Dr. Mark Papich, Chair of CVM Infectious Disease Committee, Room C-282, Phone (919) 513-6221.
3. Dr. James Floyd, Head, Department of Farm Animal Health and Resource Management. Phone: (919) 513-6240
4. Wanda Borrelli, Veterinary Teaching Hospital and member of CVM Infectious Disease Committee, Room C-208, Phone (919) 513-6580, or 513-6677.
5. Dr. Barrett Slenning, Department of Farm Animal Health and Resource Management (919) 513-6324

### IV. **SIGNS OF A POTENTIAL FOOT & MOUTH DISEASE IN ANIMALS:**

Signs and behaviors, which would alert the observer to the possibility of Foot & Mouth Disease include animals with:

- vesicles (“blisters”) in the areas in and around the mouth, nostrils, genitals, rectum, and hooves.
- ulcers in these same areas which appear after vesicles rupture.
- Lameness and reluctance to move.
- High fevers and going off feed.
- More subtle signs may be present in small ruminants, such as sheep and goats which have less obvious vesicles and ulcers.

**V. REPORTING SUSPECT CASES OF FOOT AND MOUTH DISEASE:**

Any person observing signs in an animal of Foot & Mouth Disease should immediately report them to:

- Dr. Jay Levine, Room B-337, Phone (919) 513-6397.
- Dean's Office, Room A-233, Phone (919) 513-6786:
- Office of the State Veterinarian
  - Dr. David Marshall (919-733-7601). ([David.Marshall@ncmail.net](mailto:David.Marshall@ncmail.net))
  - Dr. Fred Kirkland (919-733-7601).
  - Dr. Beth Yongue (919-733-4136).

The State Veterinarian's Office of the NC Department of Agriculture is the agency with the legal duty and regulatory authority to investigate suspected cases of Foot & Mouth Disease and, if necessary, to quarantine an animal and/or its premise until the disease is definitively diagnosed. The State Veterinarian has broad legal authority to act quickly and decisively to respond to potential outbreaks of Foot & Mouth Disease. All CVM personnel should be encouraged to consider themselves responsible to promptly report ALL suspicious cases of Foot & Mouth Disease to the State Veterinarian's Office.

**VI. EDUCATION AND AWARENESS**

The CVM Policy on Foot & Mouth Disease should be widely disseminated to all students, staff, and faculty. CVM staff includes all individuals who work in or around the CVM. Clients and visitors should be notified of the policy either through the use of signs posted at the entrance to the CVM, and/or in the way of informational brochures. The Hospital Infectious Disease Control Committee (IDC Committee) will have the responsibility of periodically reviewing this policy for the purpose of updates and oversight, with subsequent approval of changes by the CVM Cabinet.

## Dean's Office Protocol for Implementing CVM Biosecurity on Foot and Mouth Disease

1. If visitor self-identifies that he/she has visited a foreign country within past 14 days, ask him/her to provide you with a list of countries visited.
2. Compare countries listed with list of countries where Foot & Mouth Disease is known to exist. If the visitor has visited one of those countries listed, the following should occur:
  - Advise visitor that he/she will be unable to enter any areas of the CVM/VTH where livestock (cattle, horses, sheep, swine, goats, llamas, etc.) are housed or examined for 14 days after the visit.
  - Provide the visitor with a copy of the FMD Fact Sheet.
3. Ask visitor where meeting is taking place:
  - If meeting is outside of the A wing, advise visitor that one of our faculty will need to speak with him/her regarding his/her foreign travel before he/she can go to other areas of the CVM or VTH.
  - Get in contact with one of the five contacts listed in the CVM Biosecurity document to come to speak with visitor and/or party with whom they will be visiting. If you cannot reach anyone of the five, contact administrative assistant to the dean.
  - If meeting is inside the A wing, escort visitor to party with whom they are visiting and advise CVM party that their visitor has visited a foreign country in the past 14 days where foot and mouth disease exists; therefore, movement within the CVM is restricted and appropriate precautions should be taken.

Dean's Office  
August 13, 2001

North Carolina State University  
Foot & Mouth Disease  
Biosecurity Plan

Foot and Mouth Disease (FMD) is not considered a risk to human health. However, humans can carry the virus on their clothing, shoes, body (particularly through the throat and nasal passages) and on personal items. The disease is extremely contagious and spreads easily among cloven-hoofed animals such as cattle, pigs, sheep, goats and deer.

Precautionary steps are being taken to minimize the risk of outbreak of FMD to our livestock in the various locations within the University. Currently, there is no FMD in our livestock populations. Yet, there is a risk of FMD with the constant movement of people and livestock nationally and internationally. Consequently, the University will introduce measures to reduce the risk related to the transmission of FMD within its animal facilities.

Each University employee has the responsibility to undertake steps to minimize the risk to our animals. This collective effort will assist us in safeguarding our animal facilities.

The following procedure will assist employees, visitors and managers who work in, or visit, University animal facilities that may be impacted by the potential of FMD. These precautions are necessary during this time of alert and will remain in place until the period of concern passes.

Effective immediately, and until further notice, all University personnel will adhere to the following procedure:

1. Any employee (SPA, EPA, temporary, student) who has traveled outside the U.S. within a 14 day period must not enter any animal housing areas or work with cattle, swine, goats or sheep located at ANY of the University's facilities. If an employee does undertake travel to at-risk countries, the 14 day quarantine will apply. During this period the employee will not be allowed access to any animal areas. The employee who works with animals has four options during the quarantine period:
  - Take annual leave
  - Take accrued comp time
  - Take leave without pay
  - Be reassigned to another non-animal related work unit for temporary duty assignment at the same rate of pay

The immediate supervisor will work with any traveling employee who must choose among these four options. Should the employee desire an alternate work location, the supervisor, through his/her department head should reassign within the department if possible, or contact another department head to determine another work location for the duration of the quarantine. The employee should be aware that work schedules may be modified to accommodate the temporary work location.

2. Faculty, staff and students are discouraged from visiting at-risk countries. Any employee considering travel to any at-risk country should discuss the issue with their immediate supervisor and review options listed in number one above.
3. Every visitor to the University who desires to enter areas housing livestock owned by the University must receive approval from either the station superintendent or the unit/herd manager at each livestock unit. The visitor must fill out and sign a short questionnaire (developed by the facility or department) which is signed by the Faculty representative. **It is the Facility's responsibility to ensure the completion of this step.** Visitors would include those personnel having business to conduct at these locations, such as facilities personnel, researchers, commodity personnel, as well as applicants for positions at the various impacted locations.

4. Foreign visitors will be allowed to tour livestock facilities only if they have not been in a country that has FMD during the preceding 14 day time period. Requests for visits by citizens of, or recent visitors to, at-risk countries are discouraged. As FMD spreads and is contained, the list of "at-risk countries" may change over time. Therefore, the station superintendent or the unit/herd manager will review any travel to a country outside of the United States to determine the need for FMD precautions.
5. Employees are to report to their immediate supervisor if any friends or relatives have traveled to any at-risk countries and make certain that proper preventative measures are carried out to avoid cross-contamination. The station superintendent or the unit/herd manager at each livestock unit will have the responsibility of ensuring/advising of the appropriate preventative measures as issued by State, local, and/or University officials.

#### Posting of Warning Signs Posted

Signage stating the restricted access will be posted at each public entrance to areas housing cloven hoofed animals. The signs will state:

**IF YOU HAVE TRAVELED OUTSIDE THE U.S. IN THE PAST 14 DAYS, PLEASE DO NOT ENTER THIS FACILITY WITHOUT FIRST REPORTING TO \_\_\_\_\_.**  
**FOR FURTHER INFORMATION CONTACT THE UNIVERSITY BIOSAFETY OFFICER AT 515-6858.**

University procedure regarding foot and mouth disease approved by the Biosafety Committee and Human Resources. Received from Bruce MacDonald 8/13/2001.

April 3, 2001

## Fact Sheet: FOOT AND MOUTH DISEASE

From the Department of Farm Animal Health & Resource Management (FAHRM).  
College of Veterinary Medicine – North Carolina State University

### **What is Foot and Mouth Disease (“FMD”)?**

FMD is caused by a virus that infects cloven-hoofed (“two toed”) farm and wild animals, such as cows, pigs, sheep, goats, and deer. Although cloven-hoofed animals usually do not die from FMD infection, they suffer a severe illness that is economically devastating to their owners. The animals develop high fevers, stop eating, give less milk, become lame and cannot walk without pain. Blisters form on the feet, mouth, nose, and teats that then burst, leaving painful ulcers. The hooves of infected pigs may drop off and young piglets often die.

### **Humans cannot catch FMD.**

The similarly named “Hand, Foot and Mouth” virus, diagnosed mainly in children, is **not** the same disease as FMD.

### **Why is so much attention being paid to FMD?**

FMD broke out in Britain in February, 2001. The virus spread rapidly in country and then moved to Ireland, France, and The Netherlands. The virus is extremely contagious and spreads quickly unless it is contained. Stopping the spread of FMD usually requires quarantining infected farms followed by slaughtering and burial of all susceptible animals. Because of FMD virus is spread so easily, countries with the disease are banned from exporting animals, meat, or other animal products, creating further economic hardship.

Anyone having contact with animals in infected countries should not go near susceptible animals for at least seven days later. Farmers are being extremely careful to keep visitors away from their animals during this period. Some disinfectants, such as household bleach (3 gallons bleach to 2 gallons water) or undiluted household vinegar can be used to disinfect vehicles and equipment after they are thoroughly cleaned of dirt and other organic material.

Vaccination for FMD is possible but is much less effective to control an epidemic. Vaccines do not protect against all FMD virus types and do not create a strong, long lasting immunity. Vaccinated animals may still be able to spread the virus. In addition, vaccinated animals will blood test positive for the disease, complicating diagnosis and control efforts.

### **FMD is not “mad cow disease”.**

Confusion between these two diseases recently occurred because both now exist in Europe. “Mad cow disease” (bovine spongiform encephalopathy – “BSE”) is a fatal, slow developing brain disease in cattle which is unrelated to FMD. “Mad cow disease” has never been diagnosed in the U.S. The U.S. federal and state governments place an extremely high priority on keeping foreign animal diseases out of this country. They aggressively investigate any potential cases, testing thousands of animals over the past few years.

### **Animal products are safe to eat.**

FMD does not infect humans and has been kept out of the U.S. since 1929. Meat and dairy products are tightly inspected and regulated. They are as safe as ever for human consumption.

### **Where can you get further information?**

The North Carolina Dept. of Agriculture & Consumer Services website at [www.ncagr.com](http://www.ncagr.com) has a Foot and Mouth Disease link. The U.S. Dept. of Agriculture has a toll-free telephone hot line for technical questions on foreign animal diseases: (800) 601-9327.

College of Veterinary Medicine  
Biosecurity for Prevention of Foot and Mouth Disease

CVM Visitor:

I have visited the following foreign country or countries in the past 14 days:

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Name

Date