

# LOCAL HEALTH DEPARTMENT DISEASE INVESTIGATION STEPS

NC REPORTABLE DISEASE/CONDITION	INFECTIOUS AGENT (S)
<b>PLAGUE</b>	<b><i>Yersinia pestis</i></b>
<b>PREPARING FOR INVESTIGATION</b>	
KNOW THE DISEASE/CONDITION	<ul style="list-style-type: none"> <li>• Read about Plague in the CD Manual.</li> <li>• See the case definition for Plague in the CD Manual.</li> <li>• Study APHA <i>Control of Communicable Diseases Manual</i>, 19<sup>th</sup> ed., pp 463 - 471.</li> <li>• Print and review reporting forms.</li> </ul> <p style="margin-left: 20px;"><i>Part 1: Confidential Disease Report (DHHS 2124)</i> <i>Part 2: Plague (DHHS/EPI #29)</i></p>
BIOTERRORISM POTENTIAL  CATEGORY A	<b><i>Y. pestis</i> is a potential bioterrorism agent. Notify local law enforcement and state public health officials immediately if bioterrorism is suspected.</b>
<b>CONDUCTING INVESTIGATION</b>	
COLLECT CLINICAL INFORMATION	<ul style="list-style-type: none"> <li>• <b>Inform health director and state public health officials before proceeding with any plague investigation, (919) 733-3419. Consider having state medical epidemiologist contact the healthcare provider.</b></li> <li>• If patient hospitalized for this disease, obtain medical record (admission note, progress note, chest x-ray(s), biopsy report(s), other lab report(s), and discharge summary).</li> <li>• Obtain healthcare provider clinical notes from date(s) of service for this disease/condition.</li> <li>• If bubo(s) are present, obtain digital image(s) to share with medical epidemiologist.</li> <li>• Look for evidence in the medical record that supports clinical findings described in the case definition.</li> </ul>
REVIEW LABORATORY INFORMATION	<ul style="list-style-type: none"> <li>• Review laboratory report(s) specific to this disease.</li> <li>• Evaluate laboratory results to determine if requirements of the case definition are satisfied.</li> <li>• Contact healthcare provider if further testing of the patient is indicated.</li> </ul>
APPLY THE CASE DEFINITION	<ul style="list-style-type: none"> <li>• Use the case definition to determine if the clinical and laboratory findings meet the case definition criteria.</li> </ul>

<b>IMPLEMENTING CONTROL MEASURES</b>	
<b>ATTEMPT TO IDENTIFY SOURCE OF EXPOSURE</b>	<ul style="list-style-type: none"> <li>• Review clinical documentation and interview patient or other knowledgeable person for potential source(s) of exposure: <ul style="list-style-type: none"> <li>○ recent travel to the Western U.S. or other plague endemic areas (particularly parts of Africa, Asia, the Middle East, South America and western Canada)</li> <li>○ exposure to rodents, large mammals (domestic or wild) or other wildlife or pets (especially cats) with or without observance of fleas</li> <li>○ work in a laboratory</li> <li>○ exposure to anyone with a severe undiagnosed illness, especially one with respiratory manifestations</li> </ul> </li> </ul> <p>Note: Plague is not endemic to the Eastern United States (east of the Mississippi River).</p>
<b>IMPLEMENT CONTROL MEASURES TO PREVENT DISEASE AND ADDITIONAL EXPOSURES</b>	<ul style="list-style-type: none"> <li>• Consider chemoprophylaxis of laboratorians or others potentially exposed.</li> <li>• Use the CDC website <a href="http://www.cdc.gov">www.cdc.gov</a> to teach at risk people about the disease.</li> <li>• CD nurses should work with their local health director and environmental health specialist to evaluate risk, identify areas of rodent infestation and the need for personal protective equipment, restrict access to infested areas, and ensure rodent extermination programs are in place.</li> <li>• Inform public health veterinarian (919) 733-3419 and NCDA when infected animals are suspected.</li> </ul>
<b>REPORTING INVESTIGATION</b>	
<b>REPORT TO NC COMMUNICABLE DISEASE BRANCH (CD)</b>	<ul style="list-style-type: none"> <li>• Enter Part 1 and Part 2 Communicable Disease Reports into NC EDSS as a new event, or update the existing event if already entered.</li> <li>• Assign event to State Disease Registrar when case investigation complete.</li> </ul>
<b>CASE FINDING</b>	<ul style="list-style-type: none"> <li>• During the course of the investigation, interview other exposed individuals for symptoms of illness.</li> <li>• Refer symptomatic individuals to healthcare provider for evaluation.</li> </ul>
<b>SPECIAL CONSIDERATIONS</b>	
<b>PUBLIC HEALTH PREPAREDNESS AND RESPONSE (PHPR)</b>	<ul style="list-style-type: none"> <li>• If bioterrorism event likely: <ul style="list-style-type: none"> <li>○ Inform the local Preparedness Coordinator.</li> <li>○ Call the PHPR 24/7 pager (877) 236-7477.</li> </ul> </li> </ul>

<p><b>PERSONAL PROTECTIVE MEASURES</b></p>	<ul style="list-style-type: none"> <li>• If non-bioterrorism event, public health workers should exercise caution in doing environmental investigations.</li> <li>• Personal protective measures include application of insect repellent to clothing and skin, according to label instructions, to prevent flea bites, and wearing gloves when handling potentially infected animals.</li> <li>• Airborne precautions should be used in cases of pneumonic plague until 48 hours after antibiotic therapy.</li> </ul>
<p><b>RISK COMMUNICATION</b></p>	<ul style="list-style-type: none"> <li>• Any case of this disease will pique interest among media, health professionals, government officials, and the public.</li> <li>• Consider using risk communication tools conservatively if this is a low profile, naturally-occurring case.</li> <li>• Outbreaks of even naturally-occurring cases will need NC HAN alerts, EPI-X reports, MD alerts, and probably a press release.</li> <li>• In a bioterrorism event, pre-existing crisis communication plans should be enacted.</li> <li>• NC DHHS Public Information Office (919) 733-9190 is available to assist local health departments as needed.</li> </ul>