

Infant Botulism Investigation Overview

The following guidelines provide a brief overview of the steps of an Infant Botulism investigation. Botulism is a toxin made by *Clostridium botulinum* and sometimes *Clostridium butyricum* and *Clostridium baratii* bacteria. It is a rare but serious illness where the toxin attacks the body's nervous system. People usually have symptoms which start with weakness of the muscles that control the eyes, face, mouth, and throat. Infants with botulism may appear lethargic, feed poorly, be constipated, have a weak cry, have poor muscle tone (appear "floppy"). Botulism also can weaken the muscles involved in breathing, which can lead to difficulty breathing and even death. People who have symptoms should seek **immediate** medical attention.

For additional support, consult the NC Communicable Disease Branch at (919) 733-3419.

Basic Steps of an Infant Botulism Investigation

IMMEDIATE STEP	<ul style="list-style-type: none"> • Refer the healthcare provider directly to California Department of Public Health, Infant Botulism Treatment and Prevention Program (IBTPP) immediately (24/7) at (510) 231-7600 for clinical consultation and/or treatment with BabyBIG®. • California's IBTPP will notify the NC state epidemiologist and foodborne epidemiologist if treatment with BabyBIG was recommended and released.
1. Ensure case definition is met	<ul style="list-style-type: none"> • Clinical criteria and laboratory evidence are required to meet case definition.
2. Collect clinical information	<ul style="list-style-type: none"> • Appear lethargic, feed poorly, constipation, weak cry that sounds different than usual, poor muscle tone (appear "floppy"), showing less facial expression than usual, etc. • Respiratory muscles can also be involved, which can lead to difficulty breathing and death • Refer symptomatic individuals immediately to health care provider for evaluation
3. Determine the incubation period	<ul style="list-style-type: none"> • Estimated to be up to 30 days
4. Manage the case	<ul style="list-style-type: none"> • Refer the healthcare provider directly to California Department of Public Health, Infant Botulism Treatment and Prevention Program (IBTPP) immediately (24/7) at (510) 231-7600 for clinical consultation and/or treatment with BabyBIG®. California's IBTPP will notify the NC state epidemiologist and foodborne epidemiologist if treatment with BabyBIG was recommended and released. • Follow up with Epidemiologist On Call to make them aware of the inquiry from the healthcare provider, provide the health care provider's contact info and patient name and DOB so the foodborne/enterics team can coordinate specimen collection, if needed. • Look for evidence in the medical record that supports clinical findings described in the case definition • Complete the Part 2 Form/risk history and clinical packages in NCEDSS
5. Identify source of exposure	<ul style="list-style-type: none"> • A single case of infant botulism does not usually indicate a public health emergency, but the public health investigator should be aware of outbreak potential when inquiring about ingestion of food by infant • Sources of spores for infant botulism include honey and dust, although the source is unknown in most cases. • Specifically inquire about the ingestion of honey or non-pasteurized corn syrups

<p>6. Review Laboratory Information</p>	<ul style="list-style-type: none"> • Laboratory results may not be available when a suspect case is reported • Botulism-related specimens can be submitted to the CDC for culture and toxin testing ONLY after approval by the state and CDC <ul style="list-style-type: none"> • Instructions for shipping specimens will be provided at that time • Recommended specimens for infant botulism examination are feces (at least 10g) and rectal swabs • Treatment, if indicated, should not be delayed pending test results
<p>7. Implement Control Measures to Prevent Disease and Additional exposures</p>	<ul style="list-style-type: none"> • Perform thorough food history • Assure that the infant’s family is made aware of potentially high-risk foods for infants, proper food preparation and other potential routes of exposure (dust) • Involve NC Department of Agriculture Food and Drug Protection Division if contaminated food product suspected by contacting the Epidemiologist On Call (919-733-3419).

Resources –

- <https://www.cdc.gov/botulism/index.html>
- [Control of Communicable Diseases Manual \(20th edition\)](#)

Critical Elements for NCEDSS

- Ensure other infants are not at risk from the same possible exposure as this case.