

# Botulism Confirmation Testing

## Additional Laboratory Recommendations for Specimen Collection, Storage, and Shipping

[Review the botulism confirmation test order](#) for proper specimen collection, handling, and shipping instructions.

This document provides public health professionals and hospital staff additional recommendations for collecting, documenting, and shipping specimens to the Centers for Disease Control and Prevention (CDC) for botulism confirmation testing.

Ship specimens to CDC only *after* clinical consultation and the administration of [BabyBIG](#) or [Botulinum Antitoxin](#) (BAT). For adult consultations, contact the CDC Botulism Consultation Service (770-488-7100, 24/7). For infant consultations, contact the California Department of Public Health (510-231-7600, 24/7) [Infant Botulism Treatment and Prevention Program](#). Please notify the Wyoming Department of Health (888-996-9107) of suspected cases before sending to CDC.

## Collecting specimens

### Stool

- Collect 10 g of stool, if possible (a minimum of 0.5-1.0 g may be tested).
  - » Ideally, collect stool before treatment with BabyBIG or BAT.
- Enemas may be tested only if they are obtained using non-bacteriostatic water.
  - Promptly refrigerate specimen after collection.
- Stool specimens must be shipped *and* received at CDC **within 3 days of collection**.
  - » Stool specimens received later than 3 days after collection will be rejected.



### Serum

- Serum specimens must be collected **before treatment with BAT**.
  - » Serum collected after BAT treatment cannot be tested.
- Provide 5 mL, serum collected using a **no-additive or serum tube** (red-top or similar). Don't use tubes with anti-coagulants or any additives. About 10-12 mL of blood will yield 5 mL of serum.
- Don't send whole blood to CDC – whole blood cannot be tested. Separate serum from red blood cells and only ship serum to CDC. **Don't ship serum in separator tubes as the blood may re-homogenize.**
- Promptly refrigerate specimen after collection.
- Serum specimens must be shipped *and* received at CDC **within 20 days of collection**.

### Bacterial cultures

- Only **chopped meat glucose starch** broth or **chopped meat glucose** broth can be accepted.
- Bacterial cultures must be shipped *and* received at CDC **within**
  - » **15 days of inoculation when stored at room temperature** (15°C–25°C), or
  - » **30 days of inoculation when stored refrigerated** (2°C–8°C).

### Foods

- Please consult **Liz Lamere** ([tqr6@cdc.gov](mailto:tqr6@cdc.gov)), **Botulism Surveillance** ([botsurveillance@cdc.gov](mailto:botsurveillance@cdc.gov)) and the **Botulism Lab** ([botulismlab@cdc.gov](mailto:botulismlab@cdc.gov)) before collecting and sending food, if needed.
- Foods should be left in their original containers or placed in a sterile, non-breakable container.
- Empty containers with food remnants can be tested.
- Promptly refrigerate foods after collection.

## Documenting specimens

- **Each specimen sent to CDC must be accompanied by a [CDC 50.34 Specimen Submission Form](#)**
  - » *Can't download the form? Contact CDC's IT Help Desk at 404-639-6000.*
  - » CDC does not accept handwritten copies of Form 50.34.
  - » Information listed on 50.34 Form and the primary specimen container must match. Missing or discrepant information may result in specimen rejection or a delay in testing.



- On each specimen's 50.34 Form, the following information is required:
  - » Test order name (Botulism Laboratory Confirmation) and test order code (CDC-10132)
  - » Patient name and birth date
  - » Specimen collected date
  - » Specimen source (type)
    - For enemas, select "Stool" (not stool suspension)
    - For serum, select "Serum" (not blood)
  - » Institution name, street address, point of contact (POC) name, POC phone, and POC e-mail.  
*For submitter and original submitter (e.g., the state laboratory and the clinical laboratory)*
- On each specimen's container, the following information is required:
  - » Patient name and birth date
- For bacterial cultures, the culture tube and 50.34 Form must have the **inoculation date of the culture**, not the collection date of the primary specimen.

## Packaging specimens

- Pack specimens properly. [CDC's illustrated storage and shipping guide](#)
- Make sure specimens arrive at CDC at the correct temperature. Specimens received outside of the required temperature ranges cannot be tested.
  - » Stool and serum specimens *must* arrive at CDC at 2°C–8°C. (See illustration on page 4 of the storage and shipping guide.)
  - » Bacterial cultures may arrive at 2°C–8°C or 15°C–25°C. (See illustration on page 5 of the storage and shipping guide.)
  - » Specimens that arrive frozen cannot be tested. To prevent freezing, use cold packs instead of dry ice for shipping.
  - » Foods should be shipped with cold packs.
- Make sure each specimen is accompanied by a Form 50.34.



## Shipping specimens

- Label packages correctly.
  - » Packages must have proper labeling for biological hazards: **UN3373 biological substance, Category B.**
  - » Ship to the following address:

| CDC Shipping Address                                                                                                                                                            | CDC Points of Contact (POC)                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>[Insert CDC POC Name]</p> <p>Centers for Disease Control and Prevention<br/>RDSB/STATT Unit 26<br/>1600 Clifton Road, NE<br/>Atlanta, GA 30329<br/>[Insert CDC POC Name]</p> | <p><b>Carolina Lúquez</b><br/>(404) 639-0896<br/><a href="mailto:fry6@cdc.gov">fry6@cdc.gov</a></p> <p><b>Janet Dykes</b><br/>(404) 639-3625<br/><a href="mailto:jkd1@cdc.gov">jkd1@cdc.gov</a></p> |

- Schedule packages to arrive at CDC on Monday–Friday during the hours of 7:00 am–2:00 pm Eastern Time.
  - » CDC does not accept packages outside of business hours, on weekends, or on federal holidays.
  - » Be aware that some shipping providers/couriers have modified services in observance of holidays.
  - » If possible, use guaranteed next day delivery, and schedule packages to arrive the next business morning.
- Send an email to the CDC POC with the shipping company, shipped date, and package tracking number.
- If submitting by CSTOR, please ensure the package has been submitted into the system.

## More Information

- [CDC 50.34 Electron Application Job Aid](#)