Poliomyelitis

Investigation Checklist for Local Health Departments

Local health department staff should follow these steps, not necessarily in order, when investigating polio reports. It can be used alongside the VPD General Case Investigation Checklist. For more detailed information, refer to the polio disease chapter which can be accessed at: https://www.nj.gov/health/cd/documents/chapters/polio_ch.pdf

□ Obtain/assess clinical and epidemiologic information:
- Clinical presentation, specifically severity of weakness/paralysis
- Reason(s) provider is considering polio diagnosis
- Level of suspicion (high vs low on differential)
- Alternate diagnoses (e.g. AFM, Guillain-Barré syndrome, transverse myelitis)
- Immunization history (does the patient have documented polio vaccine doses? Including any recent OPV doses administered outside of the U.S.?)
- Recent potential exposure and travel history, particularly to destinations considered at increased risk for polio
- Is patient a member of a community with low vaccination coverage?

□ Request copies of laboratory, imaging, and other diagnostic test results if completed:
- Was a respiratory pathogen panel done? What were the results for rhinovirus/enterovirus?
- Was a lumbar puncture performed?
- Are there any other laboratory tests pending?
- Was an MRI of the brain and spine and/or an Electromyogram (EMG) performed?

□ Provide specimen collection guidance for submission to CDC via PHEL. If polio is highly suspected, specimens may be collected and held pending NJDOH approval:
- At least two stool specimens should be obtained 24 hours apart as early in the course of disease as possible (i.e., immediately after polio is considered as a possible differential diagnosis), and ideally within the first 14 days after onset of paralysis
- Poliovirus may also be isolated from throat swabs. Isolation from serum and CSF is less likely. Throat, serum, and CSF specimens may be collected and held if available.
- Facility/laboratory should create an order via PHEL's Online Ordering Portal:
  - Search for "Reference Laboratory Test Request", select "Other" under test type; enter "Poliovirus testing"; select specimen type (Stool); and select appropriate reference laboratory location (CDC Atlanta)
  - If online ordering is not available, a completed SRD-1 form must accompany the specimens sent to PHEL. In "Tests Requested" section of the form, indicate "Reference Laboratory," and write in "CDC Atlanta"
  - Print requisition form and include with sample in shipment to PHEL. Name and DOB must be correct and match between form and sample or PHEL will reject it

□ Identify/assess exposed and susceptible contacts for polio vaccination status, especially household members and others persons directly exposed to oral secretions or feces of the patient:

- Communicability is greatest shortly before and after onset of clinical illness. The virus persists in the throat for approximately 1-2 weeks after onset and is excreted in feces for an average of 3-6 weeks
- If case is too ill to interview, it is imperative to interview family members or friends. When case is stable enough to interview, it is extremely important to verify information already obtained and to ensure there are no additional contacts not previously identified
- Susceptible contacts are those who are unvaccinated or incompletely vaccinated
  - Refer susceptible contacts for vaccination (if not contraindicated)
  - Consider recommending an IPV booster shot for adult contacts with proof of vaccination
- Monitor exposed susceptible contacts for symptoms for at least one incubation period (up to 35 days) following date of last exposure
- Document assessment/immunization of close contacts in the Contact Tracing section of CDRSS

□ Finalize CDRSS data entry, assign appropriate case classification, and LHD Close case when investigation is complete:

- Illness onset date
- Demographics (including race/ethnicity)
- Signs/symptoms (including onset dates)
- Risk factors (additional information may be requested by NJDOH)
- Hospital admission/discharge dates
- Mortality (whether case was alive or deceased upon discharge)
- Immunizations (specifically, polio immunizations)
- Industry and Occupation Section (Current occupation, industry, and employer details)
- Assessment/immunization of close contacts

□ PLEASE NOTE: All suspected cases of **paralytic poliomyelitis** are reviewed by a panel of expert consultants before final classification occurs. Confirmed cases are then further classified based on epidemiologic and laboratory criteria.