

Invasive Meningococcal Disease (IMD)

Neisseria meningitidis (N. men)

Investigation Checklist for Local Health Departments

Local health department staff should follow these steps, not necessarily in order, when investigating reports of invasive meningococcal disease (IMD). It can be used alongside the [VPD General Case Investigation Checklist](#). For more detailed information, refer to the disease chapter which can be accessed at: <https://www.nj.gov/health/cd/topics/meningo.shtml>

- Clarify verbal reports of “[meningitis](#)” vs [meningococcal disease](#)
 - Viral vs bacterial vs fungal
 - Bacterial organism suspected (e.g., *N. men*, *H. flu*, *S. pneumo*)
 - Is *N. men* suspected? How high on differential is *N. men* – enough to begin recommending prophylaxis? Is there another leading diagnosis?
 - What laboratory tests are pending?
 - Obtain gram stain and chemistry results
 - Obtain as much information as possible regarding situation from case reporter
 - If PCR/culture results are pending but there is a high clinical suspicion of *N. men*:
 - Inquire about gram stain results
 - Request a copy of CSF analysis results

- Review reported laboratory result(s) to ensure source is from a normally [sterile site](#)
 - Only specimens collected from normally sterile sites are reportable
 - If PCR positive is reported first, inquire if culture is pending*
 - Isolate **MUST** be submitted for serogroup testing **REGARDLESS** of patient’s mortality
 - This may necessitate calling a commercial laboratory to request submission
 - Facility should create an order via [PHEL’s Online Ordering Portal](#):
 - If online ordering is not available, a completed [BACT-109](#) form must accompany the isolate submitted to PHEL.
 - 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.
 - Obtain/document the date and method isolate will be sent to [NJ PHEL](#) for serotyping as required by N.J.A.C. 8:57
 - Approval by NJDOH for **isolate** submission is not necessary as it is required by regulation

 - When result is only positive PCR* on **CSF** and no culture is pending OR culture is negative, **please** request remaining CSF clinical sample (minimum volume: 300-500µL) be sent on cold ice packs (4°C) or dry ice (-20°C) to PHEL for forwarding to Wisconsin State Laboratory of Hygiene (our VPD Reference Center) – notify NJDOH REP/SME that clinical sample is being submitted instead of isolate
 - Facility/laboratory should create an order via [PHEL’s Online Ordering Portal](#):

- Search for “*Reference Laboratory Test Request*”, select “*Other*” under test type; enter “*N. men PCR testing*”; select specimen type (*CSF*); and select appropriate reference laboratory location (*Wisconsin*).
 - If online ordering is not available, a completed [BACT-109](#) form must accompany the specimens sent to PHEL. In “Tests Requested” section of the form, indicate “*Reference Laboratory*” and write in “*Wisconsin*”.
 - 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.
- Obtain clinical info and determine illness onset date
 - Interview case, when clinically appropriate (otherwise begin with interview of proxy)
 - It is often helpful to request a copy of the medical notes
 - Collect additional necessary CDC data elements, please see below
- Identify [close contacts](#) of confirmed or highly suspected cases and refer for post-exposure prophylaxis (PEP)
 - Exposure period is 7 days before illness onset through 24 hours after receipt of appropriate antibiotic therapy
 - If case is too ill to interview, it is imperative to interview family/friends. When case is stable, it is extremely important to verify info already obtained and to ensure there are no additional close contacts not previously identified
 - Refer identified exposed close contacts to their primary medical provider for follow up and evaluation for PEP (*regardless of meningococcal disease immunization status*)
 - Document assessment/prophylaxis of close contacts in the Contact Tracing section
- Obtain/document necessary case investigation data elements (please see [IMD Disease Chapter](#), section 5C for complete details)
 - Illness onset date
 - Demographics (including race/ethnicity)
 - Signs/symptoms (including onset dates):
 - Headache; fever; stiff neck; rash; photophobia; nausea; vomiting; diarrhea; sore throat
 - Disease specific questionnaire: “Meningococcal Questions”

○ Homeless?	○ Taking Complement Inhibitor (w/i year prior to onset)?
○ College student (15-24 yo)?	○ Travel history (w/i month prior to onset)?
○ MSM status (males 16+ yo)?	○ See chapter for more details
○ HIV Status (known or tested during hospital visit)?	
 - Immunizations (specifically, meningococcal immunizations: ACWY and B)
 - [Industry and Occupation](#) section (current occupation, industry, and employer details) NEW
 - Risk factors (additional information may be requested by NJDOH)
 - Hospital admission AND discharge dates
 - Mortality (whether case was alive or deceased upon discharge)
 - Treatment (document antibiotics administered to treat *N. men* w/ dates)
 - Assessment/prophylaxis of exposed close contacts
- Finalize CDRSS data entry, assign appropriate [case classification](#), and LHD Close case when investigation is complete