



**Alabama Department of Public Health  
Bureau of Communicable Disease  
Immunization Division  
Outbreaks Investigation Protocols**

**I. Purpose**

To comply with the Notifiable Disease Rules and establish standard investigation and mitigation procedures for outbreak investigations. The Immunization Division (IMM) will investigate reports of vaccine-preventable disease outbreaks. All investigations must be documented in the appropriate IMM Outbreak Investigation Report (IOIR) and Surveillance Line List (SLL).

**II. Outbreak Definition**

- *Outbreak*: two or more individuals with similar illness and from different households resulting from a common exposure.

**III. Medical Consultant**

**Dr. Karen Landers (ASHO) or State Epidemiologist (State Epi) will:**

1. Provide consultation/guidance as needed.
2. Determine whether or not consult with the Centers for Disease Control & Prevention (CDC) is required.
3. Contact CDC when consult is required.

**IV. Bureau of Communicable Disease (BCD), Immunization Division (IMM)  
Area Field Staff (AFS) will:**

1. Contact Data Quality and Surveillance Branch Staff (DQSBS) Epidemiologists to notify them about all VPD outbreaks within 4 hours of report.
2. Initiate an IOIR on I:\drive and it should include name of facility/school, county where facility is located, date outbreak was identified, date of first known illness onset, how many reported ill, symptoms, and any commonalities. AFS are responsible for notifying their Area Nursing Directors and Area Administrators as appropriate.
3. Investigate all VPD outbreaks at the local level.
4. Gather information about ill and exposed persons and enter into Surveillance Line List (SLL) on I:\VPD\Outbreaks folder.
5. Interview and complete VPD investigation form on ill patients and discuss specimen collection.
6. Call the facility at least 3x/week to inquire about any additional ill and update the IOIR and SLL. Only known information is required on the Surveillance Line List.
7. Complete all blue AFS fields on IOIR and enter all ill and identified potentially exposed on the SLL List daily, unless the IOIR states otherwise. Update the IOIR and SLL until the investigation is closed.
8. Communicate all outbreak investigation-related requests, questions, recommendations via the IOIR. Only send an email notification to key investigators when new information is added to the IOIR with the subject line: ALxxxx-xx updated. Save all investigation data gathered in the investigation folder on the secure shared network I:\VPD\Outbreaks folder.

9. Collect at least three to five clinical specimens. Package, and submit specimens correctly to the BCL, see Standing Orders. For specimens obtained by Immunization field staff, please see Lotus Notes, Document Library, Clinic Protocol Manual, Standing Orders 2016, 2016 Standing Order IMM TB Med Adm ER, 2. Collecting specimens needed to test for vaccine preventable diseases. If patient visits a primary care provider or hospital, coordinate the shipping of specimens to BCL, making sure that it bypasses the hospital or local reference laboratory (e.g., LabCorp) unless otherwise directed.
10. Monitor ALNBS “Documents Requiring Review” for VPD disease lab results. Add the outbreak name in the “Comments” section of the report and open investigation on all positive labs.
11. Complete investigations in the Alabama NEDSS Base System (ALNBS) for notifiable disease/conditions associated with the investigation, within one business day of each case being reported (confirmed and probable by epi linkage).
12. Provide disease-specific recommendations to patients, healthcare provider, organizations, and/or facility. Recommendations should include control measures, flyers, specific specimen types needed, and test methods for confirmation of etiology as applicable. Provide control measures to facility within two working days of outbreak notification and document on IOIR.
13. Request assistance from DQSBS when needed (i.e. large outbreaks with high numbers of interviews or disease investigations required).
14. Review and comment on draft Investigation Report within five business days of receipt from central office.
15. Conduct an exit visit with the facility, and provide them with preliminary lab results and findings within 2 weeks of the investigation closing. Document the name of the person and the date the information was provided on the original IOIR.
16. Schedule and conduct a VPD Notifiable Disease presentation for notifiable disease reporters, if outbreak was not reported within 24 hours of outbreak identification. Schedule other educational presentations with facility as appropriate. Document the date presentation was provided to the facility on the original IOIR.
17. Provide the Final Report to local key investigator, facility, and healthcare providers involved in the investigation within five business days of notification that the Final Report was approved. Document the date Final Report was provided to the facility on the original IOIR.
18. Provide copies of final lab results to the healthcare providers and facility.

**Data Quality and Surveillance (DQS) Epidemiologist (Epi) will:**

1. Communicate with Area Field Staff (AFS) immediately to discuss the investigation priorities and next steps for the investigation.
2. Assist AFS with identifying cases and investigation strategies.
3. Complete all purple IOIR Epi fields, including “Describe individuals to be interviewed” and Investigation Methods within 2 hours of outbreak notification.
4. Ensure IOIR and other related documents are kept up-to-date.
5. Conduct an internet search about the facility, event, and recent disease literature research on similar situations. For schools, check ADOE absentee database.

6. Analyze investigation data including information obtained from initial questionnaires and SLL using standard epidemiologic analytic methods.
7. Notify AFS if more questions outside of VPD investigation form needs to be administered to gather additional elements for analysis.
8. Coordinate calls/meetings with Medical Consultant, AFS, and BCL to strategize a plan, update information, discuss education, control measures, and recommendations. Consult and support AFS conducting the investigation as needed.
9. If consult with ASHO and/or State Epi is needed, notify IMM Director (or Bureau Director in his/her absence) and coordinate a meeting with AFS, IMM, and BCL.
10. Consult with IMM Division Director and ASHO and/or State Epi if a call with the Centers for Disease Control and Prevention (CDC) for advice, recommendations, or lab testing is needed (Medical Consultant and/or State Epi will make the initial call to CDC).
11. Update the I:/VPD/Master Line List.
12. Save all lab reports, including emailed results from BCL, (\*.pdf) in a folder labeled "BCL Lab Reports" within the investigation folder. Save individual reports using the patient Last name, First name format. Forward emailed lab results to AFS.
13. Communicate with out-of-state public health, as needed.
14. Close the outbreak and let key investigators know it has been closed. Move investigation folder to the appropriate closed folder in the I:\ drive. Investigations will be closed after two incubation periods have passed with no new ill persons.
15. Document preliminary conclusions and recommendations in IOIR on the date of closing the investigation. This information will be provided to the facility during the AFSs exit interview.
16. Send a \*.pdf of the final Report to key investigators, save it in the outbreak folder, and also file a copy in "Final Reports" folder in Closed Investigations file.
17. DQS will notify Healthcare Infection Control & Prevention (HIC&P) staff about outbreak notifications occurring in healthcare settings such as hospitals, nursing homes, assisted living facilities, and dialysis centers, etc.

**V. Bureau of Clinical Laboratory (BCL)**

**Laboratorian will:**

1. Advise IMM on appropriate and feasible specimens for collection, submission, and testing for suspect clinical, food, and the environment.
2. Receive, test, analyze and interpret clinical test results or forward to regional lab.
3. Copy CDC DASH forms and disease-specific patient summary forms, and provide to DQSBS.
4. Email the lab results to the IMM Outbreak email group.

**VI. Investigation Report**

**DQSBS will:**

1. Compile the draft report within 2 weeks of closing the outbreak. The report must include:
  - a. Context/Background
  - b. Initiation of Investigation
  - c. Investigation Method

- d. Investigation Results
  - e. Discussion
  - f. Recommendations for Control Measures
  - g. Key Investigators and Report Authors
2. Send Report to all ADPH staff involved in the investigation for validation of the information and findings.
  3. Provide the final investigation report to the IMM Director for review and approval.
  4. Place a copy of the final Report in the “Final Reports” folder in the I:\drive

**AFS will:**

1. Review and comment on the draft Report within 1 week of receipt.
2. Distribute the final Report to staff and facility involved in the investigation within seven days of publication.

**VII. After-action Report and Improvement Plan (AAR/IP)**

The Homeland Security Exercise and Evaluation Program (HSEEP) After-action Report and Improvement Plan (AAR/IP) process will be implemented when a significant deviation from the written protocol occurs during an investigation, as determined by Division Director and State Epidemiologist, with a minimum of one AAR/IP conducted per year.

**VIII. Release of Information**

**DQSBS will:**

1. Release information to the public or individuals upon written request, as directed by IMM Director, in collaboration with the Office of General Counsel and Communicable Disease Bureau Director. State Epi and Area Administrator must be notified prior to release of information.
2. Involve the Bureau of Health Promotions when the information is released to the media.

**IX. Control Measure Recommendations**

For General VPD Outbreaks:

1. Identify potentially exposed individuals
2. Identify or recover suspected source of infection
3. Trace contacts
4. Educate providers, facility, patient, and contacts as applicable
5. Exclude ill from childcare, school, or healthcare
6. Immunize contacts, as appropriate
7. Isolate confirmed cases
8. Recommend prophylaxis for susceptible individuals

**X. Resources**

1. ADPH IMM Outbreak Investigation Report (IOIR), I:\ drive, Blank Documents and Procedures
2. AAP Red Book
3. VPD Epidemiology and Surveillance Manual, Pink Book