Poliovirus Infection, Including Poliomyelitis and Nonparalytic Investigation Guideline

CONTENTS

Version 3/2009

Poliovirus Infection, Including Poliomyelitis and Nonparalytic
Disease Management and Investigative Guidelines

CASE DEFINITION – Poliomyelitis, Paralytic (CDC 1997)

A. Clinical Description for Public Health Surveillance:

- Acute onset of a flaccid paralysis of one or more limbs with decreased or absent tendon reflexes in the affected limbs, without other apparent cause and without sensory or cognitive loss. 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.

B. Laboratory Criteria for Case Classification:

- Isolation of poliovirus from stool samples, cerebrospinal fluid or oropharyngeal secretions in cell cultures.
- Presumptive diagnosis may be made by fourfold or greater changes in neutralizing antibody level.

C. Case Classification:

- Confirmed: A case that meets the clinical case definition and in which the patient has a neurologic deficit 60 days after onset of initial symptoms, has died, or has unknown follow-up status.
- Probable: A case that meets the clinical case definition.

CASE DEFINITION – Poliovirus Infection, Nonparalytic (CDC 2007) *

A. Clinical Description for Public Health Surveillance:

- Most poliovirus infections are asymptomatic or cause mild febrile disease. Poliovirus infections occasionally cause aseptic meningitis.

B. Laboratory Criteria for Case Classification:

- Isolation of poliovirus from stool samples, cerebrospinal fluid or oropharyngeal secretions in cell cultures, with confirmatory typing and sequencing performed by the CDC Poliovirus Laboratory, as needed.

C. Case Classification:

- Confirmed: Poliovirus isolate identified in an appropriate clinical specimen (e.g., stool, cerebrospinal fluid, oropharyngeal secretions), with confirmatory typing and sequencing performed by the CDC Poliovirus Laboratory, as needed.

* Note that the “nonparalytic” case definition applies only to poliovirus infections found in asymptomatic persons or those with mild, nonparalytic disease (e.g., those with a nonspecific febrile illness, diarrhea, or aseptic meningitis). Isolation of polioviruses from persons with acute paralytic poliomyelitis should continue to be reported as “paralytic poliomyelitis.”

D. Laboratory Testing:

- Collection: Viral culture kit for swabs; sterile, screw-capped container for stool or CSF; Infectious Disease Mailer for isolates in cell culture.
- Specimen: Stool, pharyngeal swab or CSF.
- Timing of specimen: ASAP; within 14 days after onset of paralytic disease.
- Shipping: DO NOT FREEZE. Ship specimens refrigerated as soon as possible after collection. Ship isolates in cell culture at ambient temperature.
- Contact OSE (1-877-427-7317) before sending specimens or isolates to the Kansas Department of Health and Environment Laboratory (KDHEL).
- For additional information and/or questions concerning isolate collection, sample transport and laboratory kits, call KDHEL at (785) 296-1620 or refer to online guidance at http://www.kdheks.gov/labs/lab_ref_guide.htm.

E. Bioterrorism Potential: None.

F. Outbreak Definition:

- An outbreak is one or more case(s) of confirmed polio in a community. The situation should be treated as a public health emergency with appropriate resources allocated until additional cases have been ruled out.

INVESTIGATOR RESPONSIBILITIES

A. Investigation Related Tasks and Activities:

1) Confirm diagnosis with appropriate medical provider.
- Before contacting the patient or family, first determine what information has been released about the patient's diagnosis.
- Obtain information that supports clinical findings in the case definition and information on the onset date of the symptoms.
- Obtain information on any laboratory tests performed and results.
  - Determine whether virus is wild type- or vaccine-associated polio. This may require that isolates or specimens be sent to the KDHEL. Contact OSE at 1-877-427-7317 before sending.
- For hospitalization, obtain medical records, including admission notes, progress notes, lab report(s), and discharge summary.

2) Conduct case investigation to identify potential source of infection.

3) Conduct contact investigation to locate additional cases and/or contacts.
- Identify susceptible contacts exposed to wild-type polio.

4) Initiate control and prevention measures to prevent spread of disease.
- Follow-up with all cases to assure compliance with control measures.
- Assure contacts receive polio containing vaccine (as appropriate).
- Active surveillance community-wide should be completed for 2 incubation periods beyond the onset of the last case in the area.

5) Report all confirmed, probable and suspect cases to the KDHE Office of Surveillance and Epidemiology at KDHE (1-877-427-7317) within 4 hours of the initial report.

B. Notifications:

1) Report all cases by telephone to the Local Health Officer, the local on-call epidemiologist and KDHE (1-877-427-7317) within 4 hours of initial report.

2) Send a letter to local physicians and emergency rooms in the area alerting them to the occurrence of polio in the community.

3) As appropriate, use the notification letter(s) and the disease fact sheet to notify the case, contacts and other individuals or groups.

EPIDEMIOLOGY

Since the introduction of the of polio vaccine, most of the world's population is considered polio-free. In the United States, cases of paralytic poliomyelitis are extremely rare. In1980-94, an average of 8 cases of paralytic polio were reported annually; all of which were related to vaccine-associated paralytic poliomyelitis (VAPP). To reduce the risk of VAPP, a new polio vaccination schedule (i.e., inactivated polio vaccine (IPV) for doses 1 and 2, oral polio vaccine (OPV) for doses 3 and 4) was recommended in 1997 and then an all-IPV immunization schedule was initiated in 2000. Risk factors for paralytic poliomyelitis include larger inocula of poliovirus, increasing age, pregnancy, strenuous exercise, tonsillectomy, and intramuscular injections administered while the patient is infected with poliovirus. Today in the U.S., polio can occur when under-immunized travelers and immigrants import the virus from areas of the world where it is still prevalent (i.e., Sub-Saharan Africa and southern Asia).

DISEASE OVERVIEW

A. Agent:

Polio is caused by poliovirus, with antigenic types 1, 2, and 3. Type 1 is most often the agent in paralytic illnesses. Type 2 is most often associated with vaccine-associated cases.

B. Clinical Description:

Poliomyelitis is an acute illness ranging in severity from inapparent infection to paralytic disease. The fatality rate ranges between 2-10%. Symptoms include fever, headache, nausea and vomiting, stiffness in neck and back, with or without paralysis. Paralysis is typically flaccid, asymmetric and most commonly affects the lower extremities. Any recovery from paralysis usually begins within 1 month. Between 25 - 40% of persons who contracted paralytic poliomyelitis in childhood may develop "post-polio syndrome" 30 - 40 years later. This syndrome is characterized by muscle pain, exacerbation of existing weakness, and/or development of new paralysis or weakness. In children, 90% of all infections are asymptomatic.

Vaccine-associated poliomyelitis can occur in a recipient 7 to 21 days after oral polio vaccine administration or in susceptible contacts of the vaccine recipient 20 to 29 days after vaccine administration. Adults have a slightly increased risk of vaccine-associated paralytic poliomyelitis.

C. Reservoirs:

Humans.

D. Mode(s) of Transmission:
Transmission is primarily through the fecal-oral route. However, the virus can be transmitted by indirect contact with infectious saliva or feces, or by contaminated sewage or water.

E. Incubation Period:
Range 3-35 days; usually 7-14 days for paralytic poliomyelitis.

F. Period of Communicability:
In symptomatic and asymptomatic cases, poliovirus is found in pharyngeal secretions 36 hours and in the feces 72 hours after exposure. Poliovirus can remain present in the stool from 3 to 6 weeks. Infectivity is greatest 7-10 days before and after onset of symptoms.

G. Susceptibility and Resistance:
Persons who are immunodeficient are at increased risk for acquiring polio. Lifelong, type specific immunity follows natural infection.

H. Treatment: Supportive only.

STANDARD CASE INVESTIGATION AND CONTROL METHODS

Standard investigation activities include the following:

1) Confirmation of diagnosis using case definition
2) Determination of agent as a wild-type or vaccine associated virus.
3) Collection of demographic data (birth date, county, sex, race/ethnicity)
   - Length of time in U.S.
4) Collection of clinical and vaccine status data:
   - Hospitalizations: dates and duration of stay
   - Date of onset of symptoms
   - Complications
   - Immunologic status of case-patient (i.e., immuno -competent or -deficient)
   - Outcome: Survived or date of death, postmortem exam results, and death certificate diagnosis
   - Polio vaccine: dates of vaccination, type, manufacturer, vaccine lot number, number of doses or why not vaccinated
5) Determination of risk factors and transmission settings
   - Recent travel or contact those recently returning form polio-endemic areas
   - Contact with recent OPV recipient
   - Setting (i.e., vaccination rate in case's community)
6) Investigation of epi-links among cases (cluster, household, co-workers, etc).

Standard investigation **includes** completion of the General Investigation Form and Polio Supplemental Form. Further activity should include:

A. Case Investigation - Identify Potential Source of Infection:

Focus on case's activities and contacts ≤ 30 days before onset:

- Examine case's immunization history for any receipt of OPV.
- For any household or other close contacts who received OPV ≤ 75 days before onset of case's symptoms, note:
  - Contact's age and relationship to case.
  - Date when in contact with case.
  - Note vaccination date, type of vaccine, and person or agency administering. Work to collect information on vaccine manufacturer, lot number and dose number of vaccine (i.e., 1st, 2nd, 3rd, or 4th)
- Case travel history: Location and dates of foreign travel before onset.
- Any household or any other close contacts who travelled or arrived from foreign areas ≤ 75 days before case's onset; note who, where and when.
- Any polio-like illness in the community or population.
- Case finding and defining transmission setting:
  - Identify possible transmission settings: survey contacts for polio vaccination status, immune status, and recent significant illnesses.
  - Define each setting by age, vaccination and immune status.

B. Contact Investigation – Identify Exposed Individuals / Populations:

Focus on those in contact with case 10 days prior to and after onset of symptoms.

- Exposure is defined as contact with the stool or oral secretions (e.g. saliva) of an infectious person.
- Susceptible contacts have no written record of a complete polio immunization series.
  - A complete polio immunization series includes three primary doses and a single booster dose of IPV or OPV in any combination, when doses are received after 6 weeks of age and at intervals ≥ 4 weeks apart.
- There are several types of contacts to consider when dealing with a poliomyelitis investigation, they include:
  - General: Household and close contacts of a case.
  - Daycare: All direct caregivers and classmates of a case.
  - School: All close personal contacts, educators and classmates of a case.
  - Work: Coworkers sharing the same workspace of a case.
- Follow-up symptomatic contacts as suspect cases.

C. Isolation, Work and Daycare Restrictions

- K.A.R 28-1-6 for Poliomyelitis:
  - Each infected person shall remain in isolation for 10 days from the onset of illness. Enteric precautions shall be followed for six weeks.
- Standard precautions for hospitalized case-patients, with contact precautions indicated for hospitalized infants and young children.

D. Case Management, Including Follow-up of cases:

- Follow-up to assure compliance with control measures (i.e., isolation).
- In 60 days, follow-up to see if there is any residual paralysis.

E. Contact Management, Including Protection of Contacts:

- IPV, a killed polio vaccine, is administered via injection and is used as part of the routine all-IPV immunization schedule in the U.S.
- OPV, a live polio vaccine, is used in many parts of the world. When the risk of wild-type polio transmission is greater than the risk of possible VAPP, it is the vaccine of choice for polio outbreak control.
  - The epidemiological data, which defines the community at risk by immunization coverage, age and immune status, will be used to determine whether OPV should be used in certain situations.
- Decisions on the proper strategies for the effective use of OPV and/or IPV should be made with the assistance of the local Health Officer, Office of Surveillance and Epidemiology, and Kansas Immunization Program. The following guidelines are presented:
  - If the evidence indicates vaccine-associated disease, no outbreak control program is needed.
  - If evidence indicates wild-type poliovirus, an outbreak control program with vaccination planning is required.
    - Communities at risk of low vaccination coverage should be assessed for current vaccination status and offered vaccine, as needed.
    - All susceptible contacts 6 weeks of age and older with an incomplete or undocumented vaccination series or booster should be vaccinated on an accelerated schedule. (4-week intervals)
    - A booster dose of vaccine is recommended for all adults (>18 years of age) in susceptible communities and health-care workers at high risk for exposure who have completed a primary series but have not received an adult booster dose.

    Note: OPV should never be administered to immunodeficient patients or their household contacts; IPV is recommended.
- Active surveillance community-wide should be initiated for 2 incubation periods (i.e., 70 days) beyond the onset of the last case in the area.
  - Surveillance should be initiated for the following conditions:
    - Acute Flaccid Paralysis (AFP);
    - Guillain-Barre Syndrome (GBS) ;
    - Transverse myelitis;
    - Viral or aseptic meningitis
  - Physicians should be aware of and vigilant for poliomyelitis and other causes of AFP in patients. Encourage, immediate reporting all suspect cases, and the collection of necessary laboratory specimens for testing.

F. Environmental Measures: None.

G. Education:

- Persons in communities with low vaccination coverage should be warned of the potential risk for poliomyelitis and informed of vaccine availability.
- If a situation calls for the use of OPV, those exposed to the vaccine or to the recipient should be made aware of the risks of VAPP.

MANAGING SPECIAL SITUATIONS

A. Outbreak Investigation:

- Notify KDHE immediately, 1-877-427-7317.
- Active case finding will be an important part of any investigation.
- Additional activities that may be required for case finding include:
  - Collection of stool and serum samples from the household members and other contacts associated with possible transmission settings.
  - Retrospective surveys of hospitals that serve the community at risk for diagnoses consistent with poliovirus infection, including acute flaccid paralysis (AFP), Guillain-Barré Syndrome (GBS), transverse myelitis, and viral or aseptic meningitis.

B. School or Child Care Settings:

- Coordinate activities with school nurse and/or administration.

C. OPV Recipient in Settings with Immunodeficient Contacts:

- The OPV recipient should avoid close contact with the immunodeficient person for approximately 4-6 weeks after vaccination.
- If this is not feasible, rigorous hygiene and hand washing after contact with feces (e.g., after diaper changing) and avoidance of contact with saliva (e.g., sharing food or utensils) can be used but may be less effective.
- Maximum excretion of vaccine virus occurs within 4 weeks after oral vaccination.

DATA MANAGEMENT AND REPORTING TO THE KDHE

A. Organize, collect and report data with the General Investigation Form(s) and Poliomyelitis Supplemental Form.

B. Report data electronically via KS-EDSS or by fax, include:

- At a minimum, data collected during the investigation that helps to confirm or classify a case. (For epi-linked cases, please include the KS-EDSS investigation ID of the related case.)
- All information collected on the General Investigation and supplemental form(s).

ADDITIONAL INFORMATION / REFERENCES

A. **Treatment / Differential Diagnosis:** American Academy of Pediatrics. 2006 Red Book: Report of the Committee on Infectious Disease, 27th Edition. Illinois, Academy of Pediatrics, 2006.

B. **Epidemiology, Investigation and Control:** Heymann. D., ed., Control of Communicable Diseases Manual, 18th Edition. Washington, DC, American Public Health Association, 2004.

C. **Case Definitions:** CDC Division of Public Health Surveillance and Informatics, Available at: http://www.cdc.gov/ncphi/disss/nndss/casedef/case_definitions.htm

D. **Quarantine and Isolation:** Kansas Community Containment Isolation/ Quarantine Toolbox Section III, Guidelines and Sample Legal Orders http://www.waldcenter.org/Quarantine%20and%20Isolation%20Information%20for%20Health%20Officers.pdf

E. **Kansas Regulations/Statutes Related to Infectious Disease:** http://www.kdheks.gov/epi/regulations.htm

F. **Pink Book:** Epidemiology and Prevention of Vaccine-Preventable Diseases. Available at: http://www.cdc.gov/vaccines/pubs/pinkbook/default.htm

G. **Manual for the Surveillance of Vaccine-Preventable Diseases:** Available at: http://www.cdc.gov/vaccines/pubs/surv-manual/default.htm .

H. **Poliomyelitis Prevention in the United States.** MMWR 2000; 49(RR05); 1-22. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4905a1.htm

I. **Poliovirus Infections in Four Unvaccinated Children – Minnesota, August –October 2005.** MMWR 2005; 54(41): 1035-1055. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm54d1014a1.htm

J. **Additional Information (CDC):** http://www.cdc.gov/health/default.htm

Kansas Disease Investigation Guidelines

General Investigation Form

Investigation Information

Case Type: ☐Human Case ☐Non-human Case ***Disease Name:*** _____

Classification: ☐Suspect ☐Probable ☐Confirmed ***KS-EDSS Investigation ID:*** _____

Outbreak: ☐Yes ☐No ***Outbreak Name:*** _____ ***Outbreak #:*** _____

Onset Date: _____ ***Diagnosis Date:*** _____ ***Report Date:*** _____

Assigned to (Investigator): _____ ***Patient Died:*** ☐Yes ☐No ☐Unknown

Patient Information

Name Type: ☐Default/Common ☐Legal ☐Maiden ☐Nickname

Last: _____ ***First:*** _____ ***Middle:*** _____

Street: _____ ***City/State:*** _____ ***Zip:*** _____

Evening Phone #: _____ ***Daytime Phone #:*** _____

Sex: ☐Failure to Report ☐Female ☐Male ☐Other ☐Transexual ☐Unknown

Race: ☐American Indian or Alaska Native ☐Asian ☐Black or African American ☐Native Hawaiian or Other Pacific Islander ☐White ☐Unknown

Hispanic / Latino Ethnicity: ☐Yes ☐No

Date of Birth: _____ ***Age:*** _____ ***Age Unit:*** ☐Days ☐Weeks ☐Months ☐Years

Parent Information (if under 18)

Last: _____ ***First:*** _____ ***Middle:*** _____

Street: _____ ***City/State:*** _____ ***Zip:*** _____

Evening Phone #: _____ ***Daytime Phone #:*** _____

Work / Occupation or School / Grade

Worksites / School: _____

Occupations / Grade: _____

Travel History

1st ***Destination:*** _____ ***Depart Date:*** _____ ***Return Date:*** _____

2nd ***Destination:*** _____ ***Depart Date:*** _____ ***Return Date:*** _____

3rd ***Destination:*** _____ ***Depart Date:*** _____ ***Return Date:*** _____

4th ***Destination:*** _____ ***Depart Date:*** _____ ***Return Date:*** _____

Reporting Source

Title: _____ *Last Name:* _____ *First Name:* _____

Facility: _____ *County:* _____

Street: _____ *City/State:* _____ *Zip:* _____

Phone #: _____ *E-mail:* _____

Primary or Attending Physician

Title: _____ *Last Name:* _____ *First Name:* _____

Facility: _____ *County:* _____

Street: _____ *City/State:* _____ *Zip:* _____

Phone #: _____ *E-mail:* _____

Hospital Information

Hospitalized: ☐Yes ☐No *Patient Status Date:* _____

Hospital Name: _____ *Hospital City:* _____

Date Hospitalized: _____ *Number of Days Hospitalized:* _____

Notes

Supplemental Laboratory Report Form

Lab Reports

Laboratory Name: _____ ***Lab Report Date:*** _____

Ordering Provider Name: _____ ***Phone:*** _____ ***Facility:*** _____

Specimen Accession Number: _____ ***Specimen Collection Date:*** _____

Organism Name: _____ ***Organism Species:*** _____

Organism Serogroup: _____ ***Organism Serotype:*** _____

PFGE Results

Pattern 1 ***KS:*** _____ ***Other State:*** _____ ***CDC:*** _____

Pattern 2 ***KS:*** _____ ***Other State:*** _____ ***CDC:*** _____

Pattern 3 ***KS:*** _____ ***Other State:*** _____ ***CDC:*** _____

Additional Results Information

Reported Test Name:	*Coded Result:*	*Text Result:*	*Numeric Result:*	*Comments:*

Supplemental Contact Form

Contacts

Last: _____ ***First:*** _____ ***Middle:*** _____

Street: _____ ***City/State:*** _____ ***Zip:*** _____

Evening Phone #: _____ ***Daytime Phone #:*** _____ ***E-mail:*** _____

Sex: ☐Failure to Report ☐Female ☐Male ☐Other ☐Transexual ☐Unknown

Race: ☐American Indian or Alaska Native ☐Asian ☐Black or African American ☐Native Hawaiian or Other Pacific Islander ☐White ☐Unknown

Hispanic / Latino Ethnicity: ☐Yes ☐No

Date of Birth: _____ ***Age:*** _____ ***Age Unit:*** ☐Days ☐Weeks ☐Months ☐Years

Worksites / School: _____

Occupations / Grade: _____

Exposure Information

Contact Type: ☐Household ☐Sexual ☐Other: _____ ***Partner / Cluster Code:*** _____

Date of First Exposure: _____ ***Date of Last Exposure:*** _____ ***Frequency:*** _____

Nature of Exposure: _____ ***Comments:*** _____

Testing and Treatment Information

Clinic Code: _____ ***Examination Date:*** _____

Examination Test: _____ ***Examination Result:*** _____

Prophylaxis/empiric treatment date: _____ ***Drug / Dosage:*** _____

Provider (Name / Facility): _____

Disposition and Diagnosis Information

Initiation Date: _____ ***Disposition Date:*** _____ ***Disposition:*** _____

Diagnosis: _____ ***Referral Type:*** ☐Patient ☐Provider ***Post-test Counseled :*** ☐Yes ☐No

Currently Assigned To: _____ ***Follow-up Date:*** _____

Risk Factors

Pregnant: ☐Yes ☐No ***If Yes, # of Weeks:*** _____

Risk factors for complications in contact: ☐None ☐Pregnant Woman ☐HIV Seropositive ☐Unimmunized ☐Index case is a super-spreader

☐Child younger than 5 ☐Age > 65 ☐Otherwise immunosuppressed (s/p transplant, high dose steroids, etc)

Cancel Form

Polio Supplemental Form

Kansas Department of Health

Epidemiologic Case History

* indicates required fields

Case Type*
○ *Human Case* ○ *Non Human Case*

Classification*
○ *Confirmed* ○ *Not a Case* ○ *Probable* ○ *Suspect* ○ *Deleted* ○ *Unknown*

Supplemental Form Status
○ *Not Done* ○ *Form Complete* ○ *Form in Progress* ○ *Form Approved* ○ *Form Sent to CDC*

Report Date*
mm/dd/yyyy

Patient Demographic Information

* indicates required fields

Last Name*	First Name*	Middle Name	Name Type*	Age

Age Unit
○ *Days* ○ *Weeks* ○ *Months* ○ *Years*

Date of Birth
mm/dd/yyyy

Race*
(Check all that apply)
☐ *American Indian or Alaska Native* ☐ *Asian* ☐ *Black or African American*
☐ *Native Hawaiian or Other Pacific Islander* ☐ *White* ☐ *Unknown*

Ethnicity*
○ *Hispanic or Latino* ○ *Not Hispanic or Latino* ○ *Unknown*

Sex*
○ *Failure to Report* ○ *Female* ○ *Male* ○ *Other* ○ *Transexual* ○ *Unknown*

Street Address

City	County	State	Zip

Evening Phone
###-###-####

Daytime Phone
###-###-####

Occupation

Person Providing Report

Name of Reporting Facility*

Clinical Illness and Therapy

Onset of first symptoms	Onset of paralysis
mm/dd/yyyy	mm/dd/yyyy

Clinical Illness and Therapy cont.

Clinical Course

Outcome

Date of 60 day follow up mm/dd/yyyy	**Sites of paralysis** (Check all that apply) ☐ *spinal* ☐ *bulbar* ☐ *spino-bulbar*	**Specific sites**

60-day residual

- ○ *None*
- ○ *Minor (any minor involvement)*
- ○ *Significant (< or = 2 extremities, major involvement)*
- ○ *Severe (> or = 3 extremities and respiratory involvement)*
- ○ *Death*
- ○ *Unknown*

Immunization History

TOPV prior to onset of symptoms ○ *Yes* ○ *No* ○ *Unknown*	**If yes, date:** mm/dd/yyyy	**Lot Number**

MOPV - total doses ever received	**Dates**
TOPV - total doses ever received	**Dates**
IPV - total doses ever received	**Dates**

Total number of simultaneous injections at the time of polio vaccination

Injection(s) 30 days prior to illness onset:

Injection	Date	Injected Substance	Site of Injection
	mm/dd/yyyy		
First			
Second			
Third			
Fourth			

Exposure History

Case/HH member travel to endemic/epidemic area: ○ *Yes* ○ *No* ○ *Unknown*	**If yes, who:**	**Where:**	**When:**
Case/HH member exposure to person(s) from or returning from endemic areas: ○ *Yes* ○ *No* ○ *Unknown*	**If yes, who:**	**Where:**	**When:**
Case/HH contact with known case: ○ *Yes* ○ *No* ○ *Unknown*	**If yes, who:**	**Where:**	**When:**

Case had contact with OPV recipient
○ *Yes* ○ *No* ○ *Unknown*

Case had contact with IPV recipient ○ *Yes* ○ *No* ○ *Unknown*	**Date contact received first IPV** mm/dd/yyyy	**Date contact received second IPV** mm/dd/yyyy	**Date contact received third IPV** mm/dd/yyyy	**Date contact received fourth IPV** mm/dd/yyyy

Lot # of most recent IPV

CDC Laboratory

Specimens for polio virus isolation sent to CDC	Specimen type	Date Obtained mm/dd/yyyy	Result (viral type)

Special Investigations

EMG conducted	Date mm/dd/yyyy	Results

Nerve conduction	Date mm/dd/yyyy	Results

Immune deficiency diagnosed prior to OPV exposure

○ *Yes* ○ *No* ○ *Unknown*

Cancel Form

Date:

Dear Dr. _____

A case of Poliomyelitis has been diagnosed within the county.

Please be alert to the presence of this disease and ensure that children are current with their polio vaccination series.

If you have any questions, please contact the Health Department.

Sincerely,

Investigator Name, Title
Phone #
Address Line 1
Address Line 2
City, State Zip Code

Public Health Fact Sheet
Poliomyelitis (Polio)

What is Poliomyelitis?
Poliomyelitis (polio) is a viral infection most often recognized by the onset of paralysis. Since polio immunizations have become widespread, cases of polio are very rare.

What are the symptoms?
Symptoms associated with polio range from inapparent infection to paralytic disease and death. Initial symptoms include: fever, malaise, headache, nausea and vomiting, severe muscle pain and stiffness in the neck and/or back.

How is Poliomyelitis spread?
Polio is transmitted through the fecal-oral route or through direct contact with oral and/or nasal secretions of those with the disease.

Who gets Poliomyelitis?
Polio is more common in infants and young children; however, paralysis is more common and more severe when infection occurs in older individuals. At the present time there is no poliovirus in the United States.

How is Poliomyelitis treated?
There is presently no cure for polio and treatment is supportive only.

How can you prevent Poliomyelitis?
Maintaining high levels of polio immunization in the community is the single most effective preventive measure. In the United States, all children should receive four doses of the vaccine IPV at 2, 4, 6-l8 months, and 4-6 years.

Where can I get more information?

- Your Local Health Department
- Kansas Department of Health and Environment, Epidemiologic Services Section (877) 427-7317
- http://www.cdc.gov/health/default.htm
- Your doctor, nurse, or local health center

This fact sheet is for information only and is not intended for self-diagnosis or as a substitute for consultation. If you have any questions about the disease described above or think that you may have an infection, consult with your healthcare provider. This fact sheet is based on the Centers for Disease Control and Prevention's topic fact sheets.

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