RABIES EXPOSURES

Communicable Disease Forum - March 2022

RABIES

- Virus in Rhabdoviridae family
- A viral zoonotic disease
- Incubation period varies
- Almost always fatal if untreated
- Post-exposure prophylaxis is nearly 100% effective if administered properly and on a timely basis

OVERVIEW OF RABIES VIRUS

- All species of mammals susceptible
- Several distinct rabies virus variants identified in U.S.
U.S. HUMAN RABIES CASES IN 2021

September 28-November 10, 2021: CDC confirmed three human rabies deaths in the U.S.

All in persons who did not seek PEP after bat exposures that occurred during August 2021

Direct contact with bats occurred ~3-7 weeks before symptom onset

All three patients died ~2-3 weeks after symptom onset.

BAT VARIANT RABIES

- Over 75% of the human rabies cases acquired in the U.S. are from bat exposures (bites)
- A history of a definite bat bite was documented in only ~15% of the bat cases; ~85% had contact but no known bite or scratch
- Persons bitten by bats either did not realize they were bitten or did not consider the bite serious enough to seek medical care
- Bite wounds from bats are extremely small and may be undetectable within hours
- <10% of the bats submitted for testing are confirmed positive for rabies

CDC Responds to a Case of Rabies in an Imported Dog

A case of rabies in an imported dog is a rare occurrence. Rabies in dogs is a notifiable disease in the U.S., and exposure to rabies-infected dogs can pose a risk to human health.

Public health officials recommend that people exposed to rabies-infected dogs be vaccinated. If a person is bitten by a rabies-infected dog, it is important to receive post-exposure prophylaxis (PEP) as soon as possible to prevent the spread of rabies.
ANIMAL RABIES CASES: SUMMARY OF RABIES SPECIMENS TESTED AND POSITIVE CASES BY YEAR IN NJ

<table>
<thead>
<tr>
<th>Year</th>
<th>Specimens Tested</th>
<th>Terrestrial Cases</th>
<th>Bat Cases</th>
<th>Total Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>2810</td>
<td>163</td>
<td>36</td>
<td>199</td>
</tr>
<tr>
<td>2019</td>
<td>2370</td>
<td>214</td>
<td>32</td>
<td>246</td>
</tr>
<tr>
<td>2020</td>
<td>2411</td>
<td>190</td>
<td>67</td>
<td>257</td>
</tr>
<tr>
<td>2021</td>
<td>2461</td>
<td>152</td>
<td>49</td>
<td>201</td>
</tr>
</tbody>
</table>

Cats have accounted for 91% of the domestic animal cases in New Jersey since 1989. For the last 5 years, there has been an average of 17 cats infected with rabies annually.


ROLE OF LOCAL HEALTH DEPARTMENTS IN INVESTIGATIONS OF RABIES EXPOSURES

- Receive reports of confirmed or possible exposures
- Investigate exposure
- Coordinate testing at NJDOH Rabies Laboratory
- Educate exposed individual on rabies
- Advise exposed individual on PEP protocols and to seek care from HCP if indicated
- Receive CDC-2 forms; send completed forms to DOH

Communicable Disease Service
UPDATE: REQUIREMENT OF OWNER NOTIFICATION OF RABIES TESTING PROTOCOL

Bill A1219 - Signed by the Governor on January 18, 2022

• Requires the health official or veterinarian to notify the owner verbally and in writing of the necessity of rabies testing, the rabies testing protocol to be followed (including protocol of decapitation and disposal of the remains)
• Owner to provide release of the animal and signature to acknowledge notification about protocols and procedures
• If reasonable attempts have been made and owner unable to be contacted or refused to provide a signature, testing can proceed. When contact is made or notification is acknowledged, agreement to test and time of notice notification and keep on file for 6 months.

When a domestic companion animal needs to be tested for rabies:

NJDOH to develop a form for use in providing notification and post this form online

Form development currently in process. Once finalized, NJDOH will post form on the NJDOH rabies webpage and send out a notification to LHDs.

THANK YOU!

Contact information:
- 609-826-4873
- Darby.McDermott@doh.nj.gov
- zoonoticrn@doh.nj.gov
EpiCenter (Syndromic Surveillance System)

Malathi Aarkoti, DrPH, MPH
(Health Data Specialist-II)
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March 22nd, 2022

Overview of the Presentation

EpiCenter
Updates
Summary Report
DUA Process
Public Health Uses

EpiCenter
New Jersey Syndromic Surveillance System

Near-real-time data from 79 Emergency Department (ED)

Dashboards, reports w/ patient level details, summary charts, anomaly alerts, etc.

Use chief complaints/reason of ED visits to classify diseases and conditions
**Capabilities for LHD User**

- Dashboards
- Jurisdiction
  - County, Zip, Facility
- Counts or classifiers
- Charts
- Patient IDs
- Reports
- Anomalies

**Syndromic Surveillance for Drug Overdoses**

- NJ Opioid-Related Classifiers in EpiCenter
  - Suspected drug overdoses
  - Suspected overdoses involving opioid
  - Suspected overdoses involving heroin
  - Suspected overdoses involving stimulant

- Data included in the EpiCenter summary charts and reports:
  - Encounter date/time, basic demographic variables, county, city, facility name, facility (city, state), Discharge ICD, Discharge disposition, Triage notes, Opioid-related classifications, reason, registration ICD, Provider type etc.

**Suspected Overdoses Alerting Program (SOAP)**

- EpiCenter email alert system (SOAP)
- Overdose categories:
  - Suspected All Drug Overdoses,
  - Suspected Opioid Overdoses,
  - Threshold levels - customizable

- Pilot Counties (Atlantic, Camden and Ocean)
  - Expanding to other counties (10)

- Dashboards
  - 1. COVID-19
  - 2. Overdoses

- Follow-up Survey Questions
Email Alerts

EpiCenter generates "alerts" when the number of ED visits exceed the expected threshold level.

Summary Report

Epicenter User Agreements

- Contact kena.patel@doh.nj.gov to obtain user agreement
- The user agreement includes 2 pages.
- Fill out the entire top portion—indicate if your LHD is a LINCS agency and legibly print your email address (epicenter login user ID).
- Sign the top of page 2 and have the Health Officer sign on the middle of page 2.
- Return the user agreement to kena.patel@doh.nj.gov
- Other staff requesting access—email DOH
- Specific reports/dashboards to access (Opioid dashboard).

- Contact kena.patel@doh.nj.gov to obtain user agreement
- User agreements should be returned to HMS directly at useragreements@hmsinc.com, NOT NJ DOH
Public Health Uses

Data analysis – ED data available at county/facility/zip code level
Monitor trends for diseases/conditions in NJ
Summary reports for situation awareness
Investigation of anomalies
Overdose response protocols

DOH Contacts

EpiCenter Training
- Malathi Aarkoti (malathi.Aarkoti@doh.nj.gov)
- Stella Tsai (stella.tsai@doh.nj.gov)
Data Use Agreement (MDA):
- Kena Patel (kena.patel@doh.nj.gov)
- Hospital Facility User DUA: Send the signed DUA to (useragreements@hmsinc.com)
Summary Anomaly Reports
- DOJ SBTF Surveillance: SBTFsurveillance@sbtf-nj.gov
- Nannan Wang (nannan.wang@doh.nj.gov)

HMS (EpiCenter) Contacts
- Emily Spindler (emily.spindler@hmsinc.com)
- Jule Panaro (jule.panaro@hmsinc.com)

Thank You

Any Questions?
Mission Statement

The DSH (Daycares, Schools & Institutes of Higher Educations) team prioritizes collaboration, education, and training that strengthens public health and minimizes infectious disease transmission in daycares, schools, and institutes of higher education.
Childcare facilities by the numbers

According to the NJ Department of Children and Families, there are 3,990 licensed childcare facilities in the state.

<table>
<thead>
<tr>
<th>County</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic</td>
<td>410</td>
</tr>
<tr>
<td>Bergen</td>
<td>212</td>
</tr>
<tr>
<td>Burlington</td>
<td>338</td>
</tr>
<tr>
<td>Camden</td>
<td>166</td>
</tr>
<tr>
<td>Cape May</td>
<td>96</td>
</tr>
<tr>
<td>Cumberland</td>
<td>109</td>
</tr>
<tr>
<td>Essex</td>
<td>37</td>
</tr>
<tr>
<td>Gloucester</td>
<td>75</td>
</tr>
<tr>
<td>Hudson</td>
<td>288</td>
</tr>
<tr>
<td>Hunterdon</td>
<td>44</td>
</tr>
<tr>
<td>Monmouth</td>
<td>237</td>
</tr>
<tr>
<td>Morris</td>
<td>43</td>
</tr>
<tr>
<td>Ocean</td>
<td>142</td>
</tr>
<tr>
<td>Passaic</td>
<td>133</td>
</tr>
<tr>
<td>Salem</td>
<td>19</td>
</tr>
<tr>
<td>Somerset</td>
<td>118</td>
</tr>
<tr>
<td>Sussex</td>
<td>55</td>
</tr>
<tr>
<td>Sussex</td>
<td>167</td>
</tr>
<tr>
<td>Warren</td>
<td>11</td>
</tr>
<tr>
<td>Sussex</td>
<td>118</td>
</tr>
</tbody>
</table>

Childcares in NJ
HISTORIC CHILDCARE OUTBREAKS

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Thank you for all of your help; answering my questions no matter how simple or complex.

Thank you for all that you do!

Thank you for all you do—especially during these difficult couple of years!

Thank you for all you do to keep us healthy and safe.

Thank you for all your hard work!

Thank you for being a great partner in keeping us informed.

Thank you for leading us through the pandemic since March of 2020.

Thank you. Keep up the great work. Have a wonderful day!

Thank you for your guidance!

Thank you for your continued support and assistance during this time (and always!)—Park Prep Academy:) Thanks for all the updates for the past two years.

Thank you for your services to the Hoboken Health Dept. for being so supportive and responsive during this pandemic!

Lynette, Kristine, and the rest of their team, have been amazing!

Thank you for the constant support and guidance throughout the past 21 months. You are doing a great job!

A general Thank you!

I appreciate all that you do.

I want to say thank you for the hard work during the pandemic. Thank you for your analysis and breaking down the medical aspect of things moving forward.