Background

Rabies Virus & Transmission
- Rabies is an acute, progressive encephalitis
  - Caused by lyssavirus
- Usually fatal
- US: 1–2 human cases/year
  - Success of canine vaccination
- Bat variant (since 1960)
- Transmission
  - Bite
  - Non-bite
- Wound or mucus membrane contamination
- Organ transplants
- Aerosol
- Persons exposed to a potentially rabid animal should receive public health assessment as soon as possible to determine whether postexposure prophylaxis (PEP) is indicated

Global Distribution of Rabies Reservoirs

Rabies Exposure and Travel
- Worldwide, commercial air carriers transport 2.5 billion passengers annually
- Risk of rabies exposure can vary with travel activities
  - Close contact with wild or feral animals is a rabies risk!
- Unexpected exposures can happen during travel

Incident

August 5, 2011
6:45 am flight from Madison, WI to Atlanta, GA

Event

August 1: 32 passengers boarded flight
August 3: Limited contact information
August 5: Flight Magnified
August 6: 6 passengers or indicated 13 under arrangement

Investigation

Passenger EXPOSURE SCREENING questionnaire

Employee EXPOSURE SCREENING questionnaire

Risk Assessment

- PEP recommended if assessment indicated medium- or high-risk exposure

Obtaining Passenger Information

- August 10: Requested flight manifest
  - In accordance with CDC regulations (42 Code of Federal Regulations Part 70 — Interstate Quarantine)
  - Received departure manifest with 15 passengers
- August 11: Began passenger risk assessments
  - Passengers identified travel companions not on manifest
  - Manifest only included those who reboarded flight
- August 12: Airline estimated 50 passengers
  - Determined by weight calculations
  - Received reservation manifest with 48 passenger names
  - Limited contact information
  - Issued press release to identify additional passengers

Passenger Assessment (n=50)

- 15 Confirmed
- 33 Unconfirmed
- 2 Unidentified

Passenger Risk Assessment Results

- States: 11
  - Mean Age (range): 41.2 (2–63)
  - Female (%): 21 (47.0)
  - Initial Contact (%)
    - Telephone: 36 (80.0)
    - Travel Agent: 6 (13.3)
    - Email: 2 (4.4)
    - Social Media: 1 (2.2)
  - Self-reported previous rabies vaccination (%): 2 (4.4)
  - PEP Recommended (%): 0 (0.0)

Crew Risk Assessment Results

- Ground Crew: 16 (84.2)
- Pilot: 2 (10.5)
- Flight Attendant: 1 (5.3)
- PEP Recommended: 0 (0.0)
- Reported prior bat sightings: 10 (52.6)

Environmental Assessment

- No evidence of bats or bat droppings
- Airport animal-incident record review
  - 5 bats identified during 2011
- Airplane doors kept open overnight
- Holes in the ceiling where jetway meets terminal
- Jetway canopy folds most likely place for bats to hide

Recommendations for Airline and Airport

- Close off holes in jetway ceiling
- Clean out jetway during bat season
- Mandatory employee training on safe capture of bats
  - Custodial staff
  - Baggage handlers

Keeping Travelers Healthy

- Unexpected events can happen during travel
- CDC’s Division of Global Migration and Quarantine helps travelers prepare for safe travel and assists when unexpected events arise
- If bitten or scratched by a potentially rabid animal
  - Wash area thoroughly with soap and water
  - Consult with a physician immediately to determine if PEP is recommended
  - http://www.cdc.gov/travel/

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