PUI Case Studies
Session Outline

- Go over case presentation of potential PUI
- Work through discussion questions in small groups and share thoughts with the larger group
  - Your group may come up with additional questions for discussion – this is good!
Case 1: LF

- 46 year old man presents to the Emergency department with fever, chills and diarrhea
- Had been working for a NGO in Bauchi State in northern Nigeria
- One week before returning home to the US, he visited an ill colleague in the hospital in Bauchi
Case 1: LF

- The house he lived in in Bauchi was rodent infested and he would frequently find rat droppings in the food pantry

- He was prescribed malaria prophylaxis and believes he took all of it as prescribed, but may have “missed a dose or two”
Case 1: LF - Discussion

• Assume LF does not volunteer his travel history. How would your ED ascertain his recent travel history?
• What would you be concerned about given his history?
• How would your ED staff know about current outbreaks where he had traveled to?
• Would you isolate him? Where?
• Who would you notify?
Case 1: LF

• In the ED:
  • VS: Temp 38.6 C (101.5 F), HR 106, RR 22, BP 116/64
  • Appears ill, but not toxic
  • On exam he has mild abdominal tenderness
  • Labs: WBC 3.7, Plts 124, Cr 0.9, AST 92/ALT 21,
Case 1: LF - Discussion

• What are your next steps?
• What PPE would your staff be using?
• What additional diagnostic testing would you do?
• Would you transfer this patient? When? How?
Case 2: PL

- A 5 yo boy was brought to the ED by his family with a fever of 102.6 two days after returning from a one month visit to Togo.
- He had stayed within a village compound for the entire month and had no known contact with any ill person although the village experienced an outbreak of Lassa Fever.
- His only symptom was a mild sore throat.
Case 2: PL

Physical Exam
• Temp – 100.4
• Healthy appearing
• Pharynx clear with mild cervical lymphadenopathy
• Several impetiginous lesions on extremities
• He speaks French and is crying for “Maman”

Laboratory Data
• Hgb – 12.0 g/dL, WBC – 20.7 (left shift), Plt – 366k, Lytes – normal, LFTs – normal
Case 2: PL - Discussion

• What PPE would you use?
• What would you do with Mom?
• How would you communicate with PP?
Case 3: MC

• 19 year old man presented to the Emergency Department on August 18 with fever and cough

• Travel history to Oman and United Arab Emirates (returned 5 days prior to presentation)
Case 3: MC

- Patient denied any recent sick contacts
- No visits to a hospital or other health care facility
- No exposure to camels
- Arrived to the ED with group of other students who traveled with him, all are currently asymptomatic.
- Translator was needed, as patient was not fluent in English

- Exam:
  - T- 38.2°C, BB 120/76, P 90, R 18
  - Normal physical exam
- CBC, CMP: normal
- CXR- lungs clear
Case 3: MC

- The patient was immediately given a mask to wear and placed in the designated area of the ED
- Vital signs were taken and then an alert fired in in the EMR
- Designated area was secured
- ED Charge Nurse notified the ED Manager and Infection control
• Who else would you notify?
• What type of PPE would your HCW's wear during the routine evaluation of this patient?
  • Would this change for aerosol generating procedures?
• What steps would you take if the patient presented with several friends or family members?
Case 3 MC - Outcome

• Evaluation of patient completed by ED Physician with appropriate utilization of PPE
• Infectious Diseases Physician was present to advise, and notified Public Health Department
• In consultation with ID and ED, the clinical plan was established
  • A nasopharyngeal swab was obtained and sent to the Public Health lab for processing
  • Blood samples were obtained and processed by the Core Lab
• At approximately 1855 the results came back negative for MERS.
• Respiratory pathogen panel performed, and was positive for Influenza B
• Patient was discharged from the ED
• Discussion and feedback occurred with all staff involved