

### The Call

- \* HD receives a call at 10 AM from local hospital infection control nurse regarding a TB suspect in their Emergency Department (ED)
- \* Patient arrived at the ED by taxi wearing a mask at 1 AM

# The Patient

- \* The patient is a 30 year old male foreign national from the Philippines
- \* The patient speaks English
- \* Patient is an officer on a international cargo ship from Japan delivering fertilizer to the port in this county

# **Symptoms**

- \* Productive cough x 8 weeks
- \* Hemoptysis
- \* Sharp stabbing chest pain
- \* Malaise
- \* Fever
- \* Chills



# History



- \* Joined the crew 6 months ago
- \* Began coughing 8 weeks ago in Haiti
- \* Treatment with Augmentin for pneumonia 4 weeks ago in Jamaica
- \* No real improvement in symptoms after completing antibiotics
- \* Transported to hospital for severe chest pain



# Evaluation



- \* TST 20 mm
- \* CXR & CT Revealed a cavitary lesion in right apex and patchy infiltrates
- \* Sputum 1<sup>st</sup> smear AFB Negative 2<sup>nd</sup> smear AFB Positive 1 + PCR Positive for MTB



# Diagnosis TB



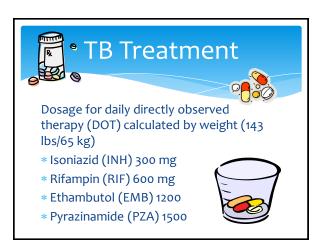


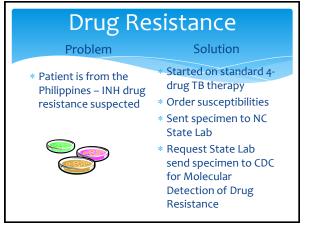
- \* Placed in isolation
- \* Hospital visit made by local HD TB nurse

# Notifications

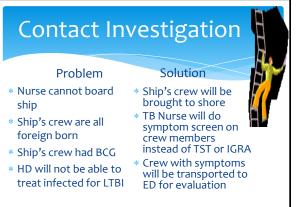


- \* Maritime Communicable Disease Emergency Response Plan
- \*1st Call HD to Coast Guard
- \* 2nd Call Coast Guard to CDC
- \* 3<sup>rd</sup> Call CDC to Atlanta, GA Quarantine Center









# Contact Investigation Results Initial TST

- \* 10 Members of the ship's crew symptom screens all negative
- \* 2 Crew members on the pilot boat TST negative
- \* 1 Port worker TST negative
- \* 1 Cab driver TST negative



# Hospital Discharge

#### **Problem**

- \* Hospital wants to release patient as soon as possible
- \* Patient is infectious

# FOR

#### Solution

- \* Locate housing for patient
- \* Provide DOT in the home
- \* Collect sputum every week to document

# Hospital Discharge





- \* HD nurse will provide grocery shopping
- \* HD nurse will provide daily DOT
- \* HD nurse coordinated the delivery of the patient's personal items from the ship





# Collaboration

#### Port Authority

- \* Homeland Security
- \* Vessel's Agent
- \* Hospital
- \* Local Health Department
- \* Coast Guard
- \* State TB Control & Communicable Disease Programs
- \* Attorney for the P&I Club (Ship Worker's Union)
- \* Atlanta Quarantine Station (Commander, Quarantine Medical Officer, PHA)
- \* CDC Quarantine Officer



### Lab Results



- \* Sputum cultures positive MTB
- \* Susceptibilities Resistant to INH, susceptible to RIF, EMB & PZA
- \* HIV test negative
- \* Liver function tests within normal limits
- \* CBC with differential within normal limits
- \* Serum creatinine within normal limits

# **Costs and Expenditures**

- \* Hospital Expenses (\$15,000)
- Cost of keeping the ship in port longer (\$5,000/day)
- \* Housing Expense (\$1250/week)
- \* Groceries (\$100 -\$150 /week)
- \* Sea Food Market (\$25/week)
- \* Fast Food (\$10 -\$15/week McDonald's)
- \* Medical Expenses/Urgent Care (\$140)
- \* Airline Ticket to return Philippines (\$1200)

### **Incentives**

- \* American Lung Association ALA) \$50 each month for incentives available
- \* Not necessary because this patient's Union paid all of his expenses







# **Emotional Isolation**

Problem



Solution \* Allowed to walk on the beach

- \* Foreign national on home isolation
- \* Alone in a foreign country
- No relatives or friends in the US
- \* Allowed to sit on his private
- \* HD nurses lent patient DVDs to watch
- Condo had cable TV and wireless internet
- \* Patient had personal computer to email, Skype family

# **Heading Home**



- Collect sputum every week to document negative smears – took 4 weeks
- \* Send a letter to State Port Director stating patient was no longer infectious to release him to travel
- Notified CDC in order for them to release him for travel (Do NOT BOARD LIST)
- \* Complete interjurisdictional notification sent copy to State and CDC
- Copied records for State, CDC, Patient and patient's physician

#### Patient's Outcome



\*Unfortunately despite numerous efforts we have been unable to document this patients completion of therapy in the Philippines





# Contacts' Outcomes



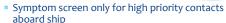
- \* Port worker second TST negative
- \* Cab driver second TST negative
- \* 1st Crew member on the pilot boat second TST negative
- \* 2nd Crew member on the pilot boat second TST positive - LTBI treatment with RIF – LTBI treatment completed



# How Did the Management of this <a href="Case">Case</a> Differ From Previous Cases?







- \* Management of INH resistance treatment with RIF, EMB & PZA for 6 minimum of 26 weeks
- Collaboration of TB care with a number of other agencies
- \* Money to pay for patient's
- \* Referral of international TB patient to another to country

