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TB in Corrections

Medical Impact and Operational Implications of TB Case Classification

First, a story...

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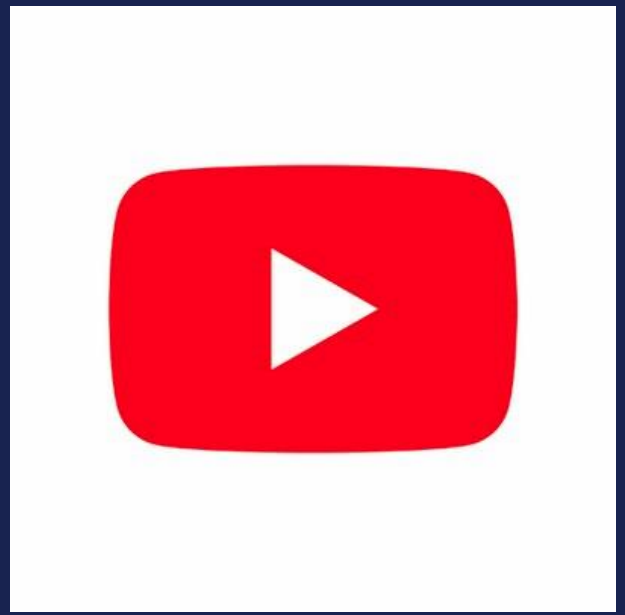
Now this is the TB Blues.
The first girl ever had the TB, she died.

TB's alright to have it here
Friend just treat ya's so low down
TB's alright to have it here
Friends just treat you so low down
Don't you ask 'em for no favors
They'll even stop a- comin' around

Mmm, this TB is killin' me
Mmm, this TB is killin' me
My mama like a prisoner
Always a-working the streets

Well, I'm on-on-on my feet
Couldn't ev' much walk down the street
But the mens are lookin' at me
From my head to my feet
But they's dead now, this TB is killin me
You're better buried or in the deep blue sea

Mmm-mmm
Mmm-mm-mm
I got a tuberculosis
Consuption is killing me.



Lead Belly

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- Lead Belly was a folk-blues singer, songwriter and guitarist.
- Born in Mooringsport, Louisiana, in late 1880s.
- He was imprisoned in TX for murder in 1918.
- According to tradition, he won his early release in 1925 by singing a song for the governor of Texas.
- Lead Belly was imprisoned again, for attempted murder, in 1930.
- While imprisoned again, he was discovered, signed, and recorded over 48 songs, some of which are in the Library of Congress.

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That was the 1930s…

We know *today* that:

- You can't sing your way out of jail
- TB is alive and well in our correctional facilities
- There are ways to make sure TB doesn't give your facility the Blues…

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Our purpose & objective

Purpose:

To engage public health and corrections experts in addressing challenges and developing strategies for tuberculosis (TB) prevention and control in Texas correctional and detention facilities.

Objective this hour:

To review tools and develop strategies for proper **TB case identification and classification**

Our challenge: Manage TB in Corrections

1. Understand the types of TB
2. Recognize when it enters our doors
3. Know what to do with each type of TB
4. Ensure that medical and operations are communicating together when TB is involved
5. Report the right way to the right people
6. Ensure that when TB is recognized, it is managed in a way that still respects the operations of the facility

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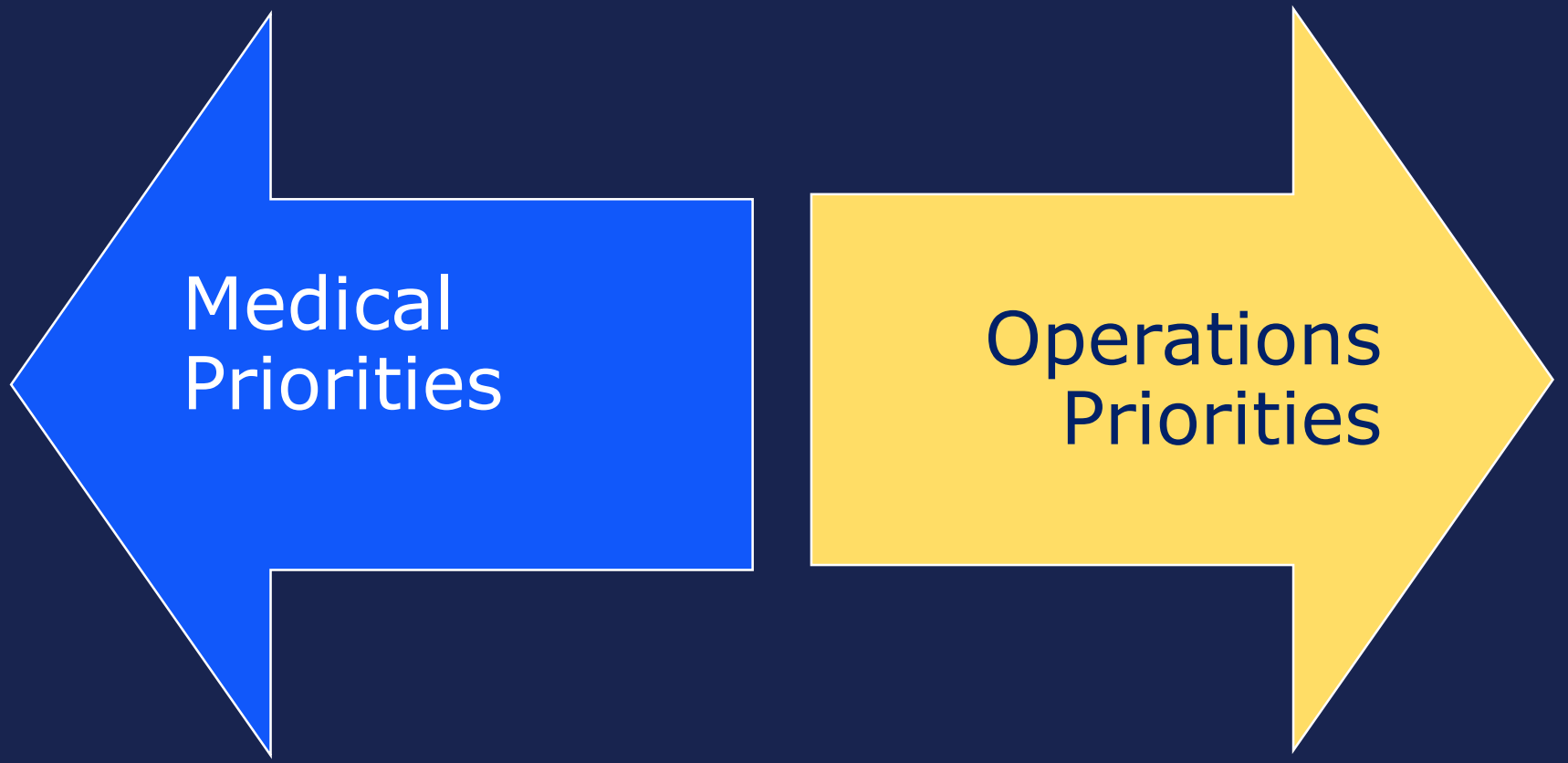
The challenge



Our Goal

Medical

Safe Facility where TB is Controlled

Operations

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One tool to understand priorities of TB Control

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1. Early and accurate detection, diagnosis, and reporting of

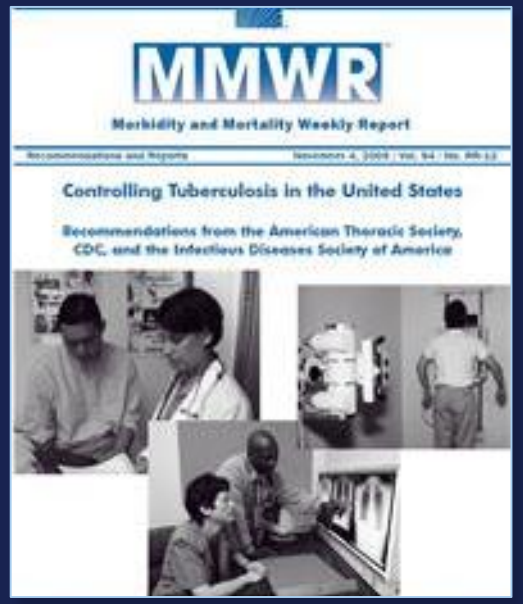
   TB cases leading to initiation and completion of treatment

2. Identification of **contacts** to infectious TB, and offering treatment for those who test positive for infection after being exposed

3. Identification of other persons with **latent TB infection** at risk for progression to TB disease and treatment of those persons with an effective drug regimen

4. Identification of settings in which a high risk exists for

   transmission of *Mycobacterium tuberculosis* and application of effective **infection-control measures**



Source: ATS/CDC/IDSA. Controlling Tuberculosis in the United States Recommendations from the American Thoracic Society, CDC, and the Infectious Diseases Society of America. MMWR 2005; 54 (No. RR-12):15.

Question

Controlling TB is public health's priority, but what is yours in your correctional setting?

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2 minutes, 1 word…go!

Question

Can we collaborate so that both priorities are met?

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How to make sure priorities come together

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Medical

- Provides medications
- Does assessments
- Requests medical holds
- Responsible for managing health needs (ex isolation)

INMATE

Operations

- Intake/screening
- Processing/placement
- Logistics and SECURITY
- Responsible for overall logistics (ex where inmates are located)

Working together, Controlling TB

Early and accurate detection, diagnosis, and reporting of **TB cases** leading to initiation and completion of treatment

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Two types: infection & disease

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TB Infection:

NOT INFECTIOUS

- Bacteria enters the body through the lungs
- Bacteria is alive…but not active
- The person's immune system kicks in and controls the invader
- People don't have any symptoms of the infection
- These people cannot spread it to others

TB disease:

INFECTIOUS (until proven otherwise)

- Bacteria enters the body through lungs
- Bacteria is alive…and multiplying
- The person's immune system isn't able to control the bacteria as it divides and grows
- Symptoms start: coughing, losing weight, sweating at night
- The bacteria can now be coughed out and spread to others

A second tool for you

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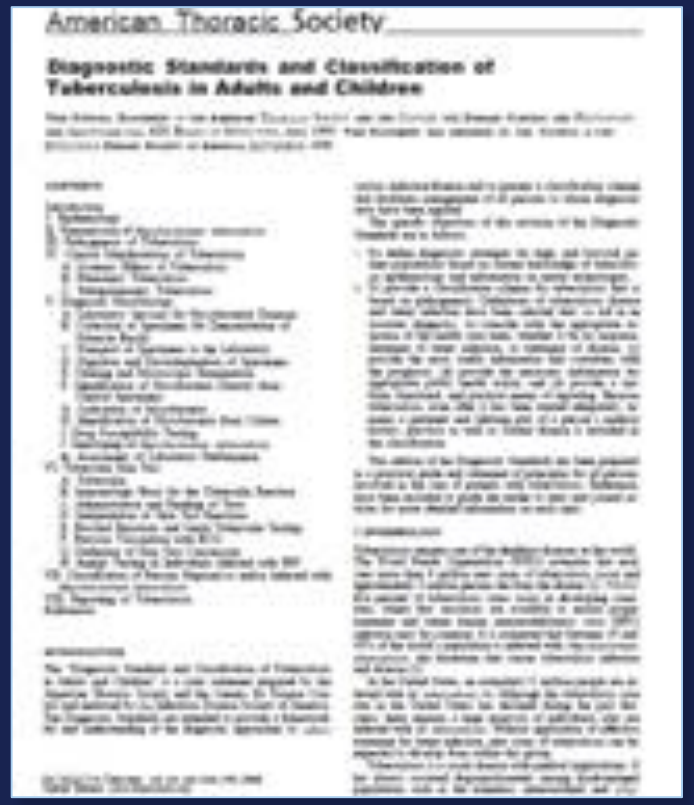
One resource for your facility: American Thoracic Society Classifications of TB

https://www.cdc.gov/tb/publications/pdf/1376.pdf

TB screening and control in corrections:

1. detect TB disease-isolate and treat (and report!)
2. detect TB infection-and refer for treatment (and report!)



American Thoracic Society

Diagnostic Standards and Classification of Tuberculosis in Adults and Children

Classifications

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Class	Description
0	No TB exposure, not infected
1	TB exposure, no evidence of infection
2	TB infection, no disease
3	TB, clinically active
4	TB, not clinically active
5	TB suspected (diagnosis is pending)

https://www.cdc.gov/tb/publications/pdf/1376.pdf

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Which one is medical more concerned with, and why?

Classes 0, 1: No TB

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NONE, process as usual

Class	Description	Someone in this category…	IGRA/TST	CXR	S/S or Sputum	Needs in corrections
0	No TB exposure, not infected	No risk for TB, no testing needed	Negative, if done	Normal, if done	No S/S	NONE, process as usual
1	TB exposure, no evidence of infection	Identified as being exposed to infectious TB (contact or risk factors present); no infection	Negative	Normal, if done despite negative TST/IGRA	No S/S	NONE*, process as usual **HIV positive may need medical at some point*

Class 2: TB Infection*

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Class	Description	What this looks like	IGRA/TST	CXR	S/S or Sputum	Needs in corrections
2	Tuberculosis infection *(formerly known as LTBI)* no disease	Identified as a contact to an infectious case, or targeted testing needed due to risk factors	Positive (if a contact to a case, only 5mm needed**) ***see CDC for TST results*	Normal; if abnormal it is not consistent with active TB or it is stable after more diagnostics that ruled out TB disease	No S/S, or if s/s present, they have sputum that is negative culture (may be other disease)	No isolation needed, process/intake as usual* *Do you treat in corrections?* *Continuity of care?* **How do you report?*

Class 4: TB, not active

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Class	Description	What this looks like	IGRA/ TST	CXR	S/S or Sputum	Needs in corrections
4	TB, not clinically active	Previous dx of TB or abnormal stable CXR w/ positive TST/IGRA; may never have had treatment, may be on treatment for infection, or may have completed treatment for past disease.	If done, it should be positive	**Abnormal but stable, <u>no evidence</u> of current disease**	No S/S If sputum is collected, it is negative smear and culture *If any s/s, this is not a class 4, it's a class 5 until sputum results	No isolation needs, process as usual* **May be high risk for progression to TB if untreated* **do you report? How to refer to LHD?*

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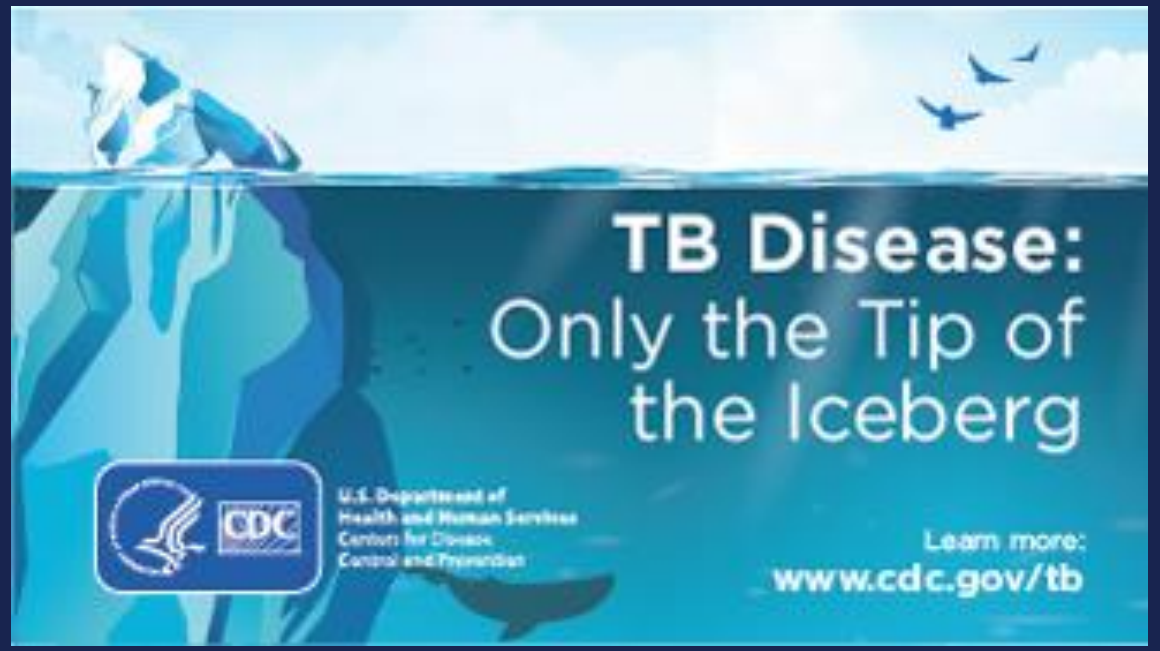
Do the three classes mentioned above (0,1,2,4) have any OPERATIONAL vs. MEDICAL conflicts?



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Let's move on to the last 2 that will need more communication between medical and operations…

Classes 3 and 5

Class	Description	What this looks like	Needs in corrections
3	TB, clinically active clinical	TB Disease: May have positive TST/IGRA, CXR is abnormal for TB, patient has symptoms of disease	Isolate, send to medical, can't be with general population
4	TB, not clinically active	Person was identified as having an abnormal stable CXR, may have had TB in the past.	NONE, process as usual; may need medical eval during stay
5	TB suspected (diagnosis pending)	Could be TB Disease: Positive TST or IGRA, normal CXR, no symptoms	Isolate, send to medical, can't be with general population

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Class 3: Active TB*

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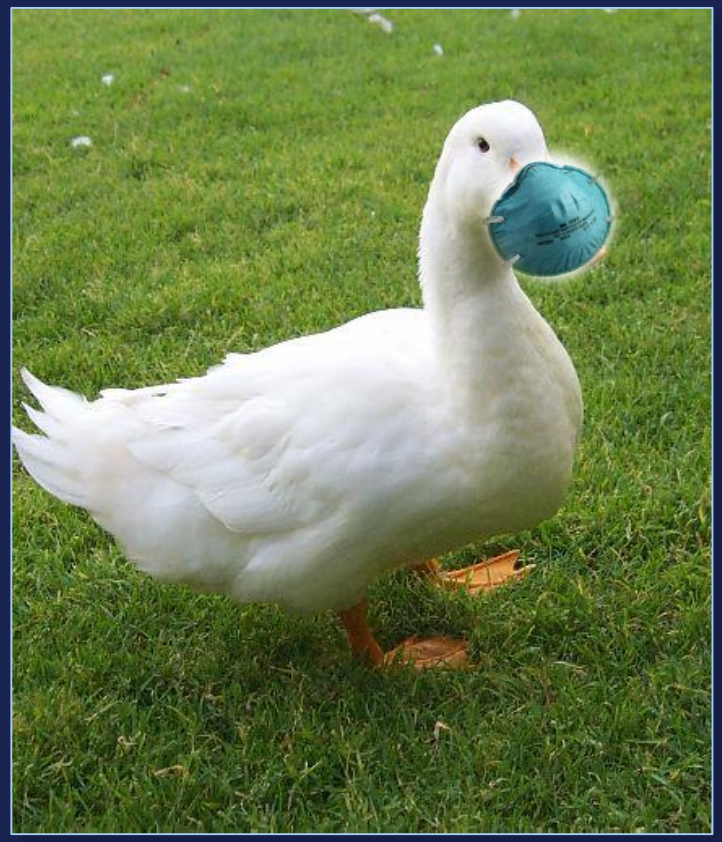
Class	Description	What this looks like	IGRA/ TST	CXR	S/S or Sputum	Needs in corrections
3	TB disease, clinically active Lab confirmed or Clinical case	Must have clinical, bacteriological, and/or radiographic evidence of current tuberculosis. Most obvious is isolation of *M. tuberculosis.* Remains Class 3 until treatment for current episode is completed	Can be positive or negative	Abnormal, consistent with TB (could be infiltrates, cavity, nodular lesions, pleural effusion, among others) Normal if extra pulmonary, but still TB disease (TB of the bone, of the eye…)	s/s of TB disease, can be subtle (fatigue) Sputum is either smear negative or positive Culture can be positive (lab-confirmed) or could be negative (clinical) but still a case if meds started and deemed clinical after two months	MUST ISOLATE- AII until infectiousness is ruled out CI may be indicated Treatment should occur as soon as possible Medical and Operations must communicate on transfers or discharge **Must be reported to local health*

Class 3



Can be lab-confirmed or not, but if a person is class 3, they have active TB disease.

Isolate, isolate, isolate, until you know more

This is where Operation and Medical MUST work together

Class 5: TB suspected*

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Class	Description	What this looks like	IGRA/ TST	CXR	S/S or Sputum	Needs in corrections
5	Tuberculosis suspected, diagnosis pending	Diagnosis of tuberculosis is being considered, whether or not treatment has been started, until diagnostic procedures have been completed. Temporary class for <3 months, then place in another class when tests are done.	Can be positive or negative *If negative, then they need symptoms and or abnormal CXR*	Abnormal	s/s of TB disease that are concerning for TB, or no symptoms Sputum is either smear negative or positive, but medical wants to rule out TB	MUST ISOLATE- AII until infectiousness is ruled out CI may be indicated Treatment should be started if recommended Continuity of care needed for transfers or discharge **Must be reported to local health dept*

Class 5

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- Sputum could be negative
- TST or IGRA could be negative
- But something looks a little different…
- A CXR that is abnormal
- And inmate has lost a lot of weight and that darn cough won’t go away…

Class 5

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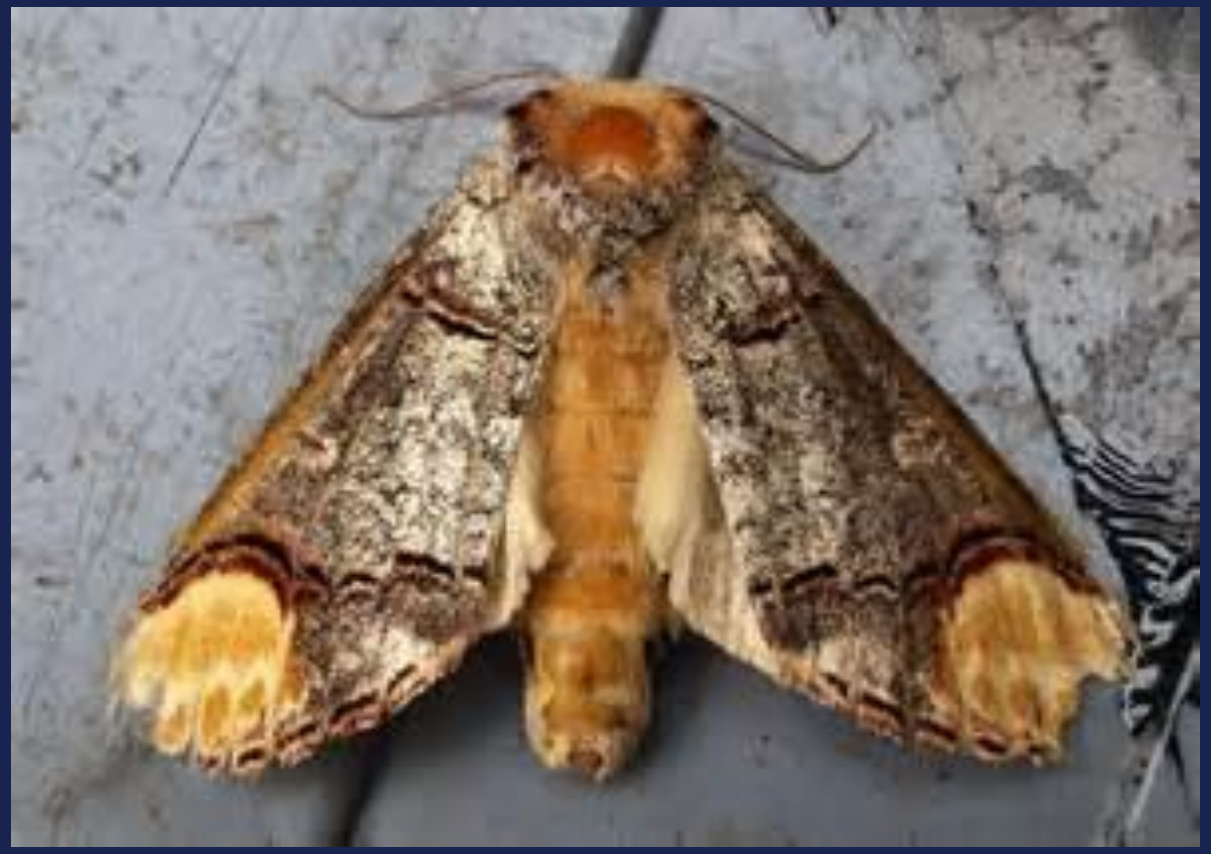

- It could be there, you just haven't proven it yet
- Treat like TB until proven otherwise

Class 5: TB is suspected

Needs ONE of these:

- +AFB smear (any anatomic site)
- Biopsy or pathology suspicious for active TB disease

(OR) At least two of these:

- +TST or +IGRA
- Radiographic findings consistent with active TB disease
- Productive cough > 3 weeks
- Other symptoms concerning for TB disease
- Initiation of treatment for TB disease

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Class 3 and 5: Tuberculosis

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Medical Priorities:

- Must isolate until no longer infectious; needs AII; this is for overall safety
- Must know where this patient is at all times
- Continuity of care: discharge or transfer plans must be coordinated

Operations Priorities:

- This person needs a space but space may be limited- can you just put them anywhere?
- The stay may be finite- movement may need to occur
- The transfer or d/c may be out of Operations control

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Let's talk…

Scenario

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- 29 year-old male – repeat offender with history of violence in correctional facilities
- Incarcerated for 12 days, must be moved to another facility ASAP
- TST on day 5 was 11 mm
- Says he's been working so hard he lost over 25 pounds since his last incarceration (1 month ago)
- He has an ongoing smoker's cough and is feeling very tired lately
- He has not had a CXR yet
- Two sick calls with complaint of "cough that won't go away"
- Scheduled for clinic - requested medication for his cough and is now coughing up blood

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Discussion Questions:

Per table (make sure there is a mix of medical, operations, and public health) answer the following:

1. What class of TB do you think this is?
2. Medical: what are your top 3 “musts” that you need in this inmate?
3. Operations: what are your top 3 “musts” that you will need done for this inmate?
4. Where do priorities conflict, if any?
5. What CAN be done to meet in the middle?
6. When and how should public health be notified?
7. Does your facility have a system in place to manage all classes of TB?

CPC Planning Meeting

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As a committee,
list 3 items that are needed
as a follow up to this discussion

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Thanks!