TB in Corrections

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July 18, 2024

TB Intensive
July 16 – 18, 2024
San Antonio, Texas

Jana Winberg, MD has the following disclosures to make:

- No conflict of interests
- No relevant financial relationships with any commercial companies pertaining to this educational activity

TB in Corrections

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Hardin County Health Authority

Beaumont TB Elimination Department

Content

- Objectives
- Correctional Facilities
- Education is Everything
- Correctional TB Forms
- Patient Study 1-3
- Conclusion
- Questions

Objectives

- Understanding the burden and challenge of Tuberculosis (TB) within corrections
- Better Understand how we (Public Health) can help
- Patient studies that highlight challenges

Correctional Facilities

Correctional Facilities 2022 – 11.1%*

No Numbers available for 2023 but estimate 1235 x 2.1% = 26 people

- 14 people (1.3%) in the Texas Department of Criminal Justice (TDCJ), the state's correctional prison system
- 84 people (7.7%) in other correctional facilities
  - 6 in federal prison
  - 78 in other facilities (detention, ICE)
- 23 people (2.1%) in a city or county jail

***11% = 121 Inmates with disease**

Federal Prison and State Jail

- Federal Bureau of Prisons (19,000 beds)
  - Inmates that have broken Federal law and are sentenced. When released may be on Parole
- TDCJ (160,000 beds)
  - Inmates that have broken State law and sentenced to 6 months to 2 years. When released may be on Probation

❖**These take care of their own inmates with TB**

City and County Jails

- 252 jails in 254 counties
- 95,000 beds About 70,000 full at all times
- Hold inmates pretrial before sentencing to TDCJ, and those that bond out
- Inmates who are sentenced with misdemeanors with < 1 year sentence

Local Jails and Challenge(s)

We must be alert and keep our eye on many details. Do not focus on any one thing too long. And don’t turn your back on anything

My Local Jails

- How many inmates do they see?

Facility	Beds	Booked
Hardin County	195	2168 (11x)
Jefferson County	1665	11220 (6.7x)
Downtown Beaumont	501	1307 (2.6x)

My Local Jails

- How many tests per month?

Facility	Placed	Read
Hardin County	~44	~42
Jefferson County	~375	~250-300
Downtown Beaumont	~50	~50

Challenges

- Local Jails are revolving units
  - Inmates come in, bond out, go to court and get released
  - Inmates may do weekend jail (in Friday and out Monday)
- Tubersol shortage of 2019 exposed issues
  - Testing, supply on hand, reporting - summed up by poor education, understanding, oversight

Understanding and managing TB can be confusing and may feel messy and unorganized

But it can also feel like trying to do dental work on a gator. Too close, and you get bit. Not close enough and the job's not done.

Education *is* Everything

Things *We* Should Know (About our Jails)

- Who provides their medical services
- Is the medical service contracted
- Is there 24 hour care
- How many Airborne Infection Isolation Rooms (AIIR) are there
- Who is your contact person (POC) at the Jail
- How much does your Jail POC know about TB

More Things *We* Should Know

- What is the turnover in nursing staff
- Get to know the jail nurses
  - What TB experience do they have
  - Can they see the previous TB test results
- How useful is the jail's Medical Record System
  - Does the system change with the Medical Provider
  - Does it allow access to past records

TB-430

TB-800

TB-805

Correctional TB Forms

TB-810

TB-815

12-11461

12-11462

Search for DSHS Texas TB Forms

TB Forms Resources

Quick Links

Consent/Control Orders

Consents: General

Document Number	Title	Revision Date
I-36	General Consent and Disclosure (English/Spanish)	4/2010

Correctional Facilities

Correctional Facilities

Document Number	Title	Revision Date
TB-430	Social History Interview for Correctional Settings	6/2018
TB-800	Correctional TB Risk Assessment	6/2017
TB-805	Correctional TB Screening Plan	9/2023
TB-805-I	Correctional TB Screening Plan - Instructions	9/2023
Resource	Correctional TB Screening Plan - Checklist (for health departments)	9/2023
Resource	Correctional TB Screening Plan - Training (for health departments)	9/2023
TB-810	Tuberculosis Symptoms Screening Form (English)	4/2017
TB-810-E	Tuberculosis Symptoms Screening Form (Spanish)	4/2017

Form TB-805 Highlights

****NEW 9/23**

TB programs cannot distribute DSHS purchased medications to the jail unless they serve as the medical provider. (Question 10)

- **B28. Who supplies your facility with TB medications? Please provide the name and address of the entity. Do not use acronyms or abbreviations.**
- Name: _____
- Address: _____

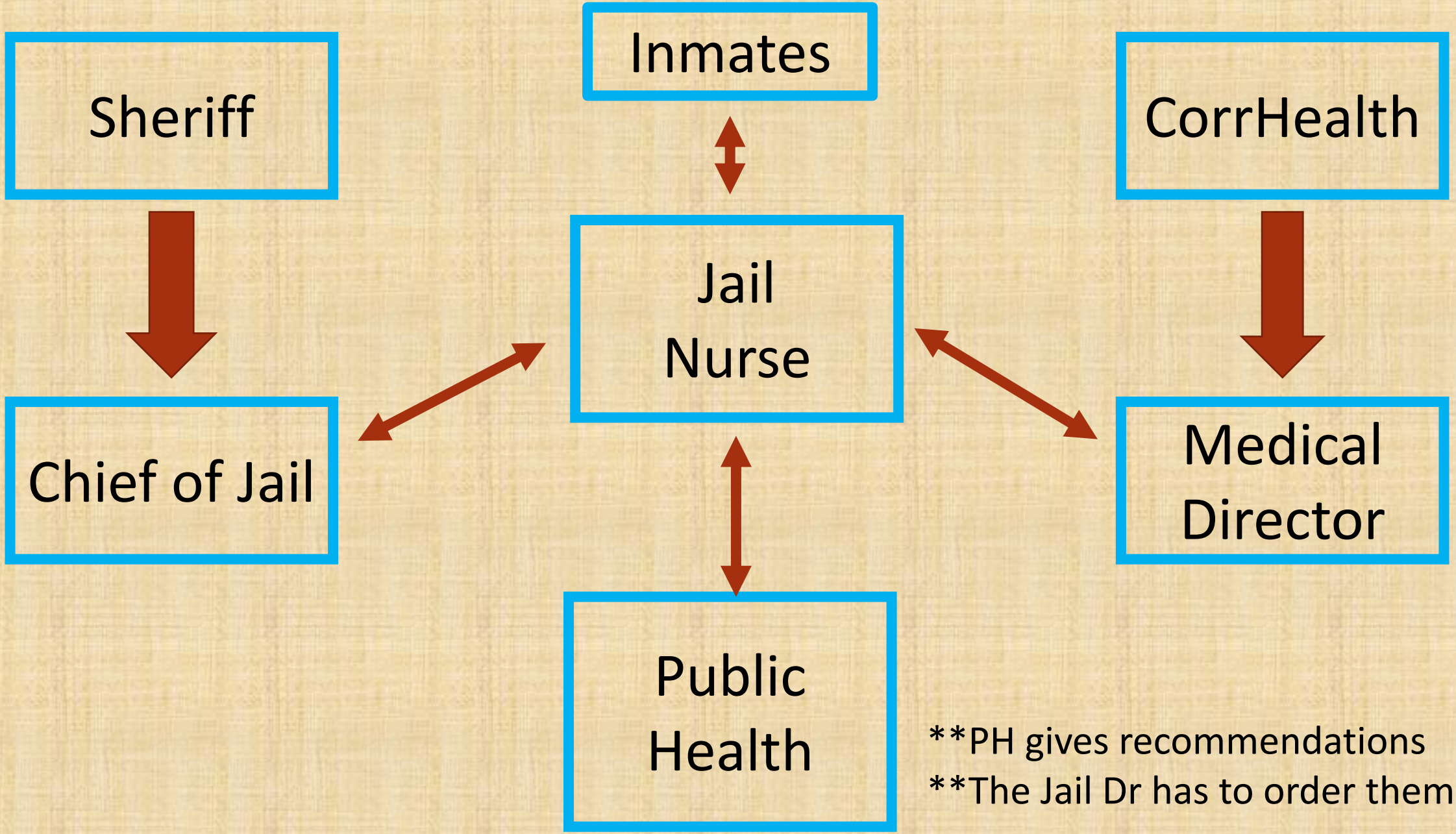
Form TB-805 Highlights

- State gets medications from Federal 340B program
- Not allowed to provide medications to other 340B eligible entities
- Jails are 340B eligible entities, many use IHS pharmacy
- My jail uses CorrHealth which uses a pharmacy that does not participate in the 340B program

Form 12-11462

- The Monthly Correctional TB Report
- 5.Number of Prior Positives (**Written** documented history of(+) tuberculin skin test (TST) or IGRA):
- Here is why it is important that the person doing the TB screening and testing needs to be able to access previous results within their own Medical Record System

Teach *Your* Nurses



**PH gives recommendations
**The Jail Dr has to order them

Basics of TB Care - Testing

- Isolation of IM – may be released when smears are AFB neg and IM has had 2 weeks of meds.
- Sputums (set of 3) smear and culture every 2 weeks until three smears in a row are AFB negative.

More Basics of TB Care - Testing

- Then Sputums monthly until growth negative x 2 sets (6 cultures). Results take 8 wks, so keep collecting, even if you don't have results, until 2 sets are growth negative.
- Blood work baseline then monthly while on meds (CMP, CBC). HIV at baseline. Follow liver, platelets, glucose, creatinine, maybe uric acid, maybe a1c

Basics of TB Care - Therapy Monitoring

- Monthly weight and side effect screen
- Baseline Eye exam then monthly while on Ethambutol (acuity as in 20/20, and color blind testing)
- Chest X-ray baseline (PA, ?lateral) and after 2 mos of meds. If abnormal at 2 months, may want to repeat close to the end of therapy to get a new baseline with scars

More Basics of TB Care - Therapy Monitoring

- TB therapy is 6 or 9 months with total number of doses at 130 or 195 counted at 5 days a week. It is total length of therapy **and** number of doses that kills the TB.
- Length of therapy depends on how quickly sputum samples convert to no growth of MTB, when CXR clears, if there was a cavity, and if diabetes is well controlled.

Basics of TB - Medications

- Medication is weight based.
- It is usually RIPE (Rifampin, Isoniazid (INH), Pyrazinamide (PZA), Ethambutol (ETH) with B6)
- **BUT** in Jefferson County almost all infections are INH resistant. Replace INH & B6 with Moxifloxacin 400 mg daily (or Levaquin 750 mg)

More Basics of TB - Medications

- Start IM on Rifampin, Moxifloxacin, PZA and ETH for 6 or 9 mos. **Make sure the TB is sensitive to all the drugs including Ofloxacin.**
- If liver does not tolerate PZA, it can be dropped, BUT dropping PZA early will extend treatment to 9 months. And the TB must be sensitive to the other meds.
- ?? Contact Health Dept or Heartland TB Center

Basics of Exposure Investigation

- Begin exposure investigation in the first few days.
- Exposure of 6 hours a week is a risk.
- Highest risk will be IMs in the same cell
- If IM is a trustee then those the trustee works with
- Guards who spend 6 hours sharing airspace (those who work multiple days a week in the same area).

More Basics of Exposure Investigation

- The identified people should have a symptom screen and a TB test (TST or QFT) done as soon as possible (even if they had one 3-4 months ago)
- They will need to be retested at 8 weeks after last exposure to the IM who is contagious.

Patient Study #1

AH Study #1 – 37 yo WF

- transfer from Harris Cty to Jefferson County Jail on Friday, 12-29
- She has no meds with her.
- All IMs get a Texas Uniform Health Status Update. (Maybe) It comes with the officer who brings the IM. It goes to booking, then to Medical (but when??)

Study #1

This is what the nurses get to work with.

TEXAS UNIFORM HEALTH STATUS UPDATE

This form MUST accompany all offenders transferred to and from all Texas criminal justice entities.

I. DEMOGRAPHICS

NAME: LSA DOB: AGE: 37 RACE: White or C

WEIGHT: 174 HEIGHT: 170.2 SEX: ☐MALE ■FEMALE

☐CCQ MATCH (CARE) CCQ NAME: State ID #:

II. CURRENT/HISTORY OF HEALTH PROBLEMS, TO INCLUDE CHRONIC HEALTH PROBLEMS

MENTAL HEALTH AND INTELLECTUAL OR DEVELOPMENTAL DISABILITY (IDD)

■NO CURRENT MENTAL HEALTH OR IDD NEEDS ☐NO HISTORY OF MENTAL HEALTH OR IDD NEEDS

☐MENTAL HEALTH DIAGNOSIS: ☐IDD DIAGNOSIS:

☐ALZHEIMER'S DISEASE ☐DEMENTIA ☐COGNITIVE DISORDER(S) TYPE:

☐SUICIDAL ☐ACTIVE ☐RECENT ☐HISTORY ☐HAS BEEN PSYCHIATRICALLY STABLE FOR 30 OR MORE DAYS

COMPETENCY RESTORATION ☐INPATIENT ☐JAIL BASED ☐OUTPATIENT ☐UNKNOWN

DATE: LOCATION:

MEDICAL (PHYSICAL HEALTH)

☐NO CURRENT MEDICAL PROBLEMS ☐NO HISTORY OF MEDICAL PROBLEMS

■DIABETES ☐INSULIN ☐SPECIAL DIET

☐PREGNANCY NO. OF WEEKS: ☐HIGH RISK

☐CARDIOVASCULAR/HEART TROUBLE DIAGNOSIS:

☐DRUG ABUSE ☐DETOX TYPE/STATUS:

☐ALCOHOL ABUSE ☐DETOX TYPE/STATUS:

☐ORTHOPEDIC PROBLEMS TYPE(S):

☐ASTHMA ☐DENTAL NEED ☐DIALYSIS ☐HYPERTENSION ☐OXYGEN ■SEIZURE

☐RECENT SURGERY DATE(S): TYPE(S):

III. SPECIAL NEEDS (CHECK ALL THAT APPLY)

HOUSING

■NONE ☐SKILLED NURSING ☐EXTENDED CARE ☐PSYCHATRIC INPATIENT

☐ISOLATION DUE TO: ☐OTHER:

TRANSPORTATION

☐NO RESTRICTIONS ☐AMBULANCE ☐CRUTCHES/CANE/WALKER ☐WHEELCHAIR/WHEELCHAIR VAN

☐INDEPENDENT WITH SPECIALTY SHOES ☐PROSTHESIS TYPE(S):

OTHER NEEDS

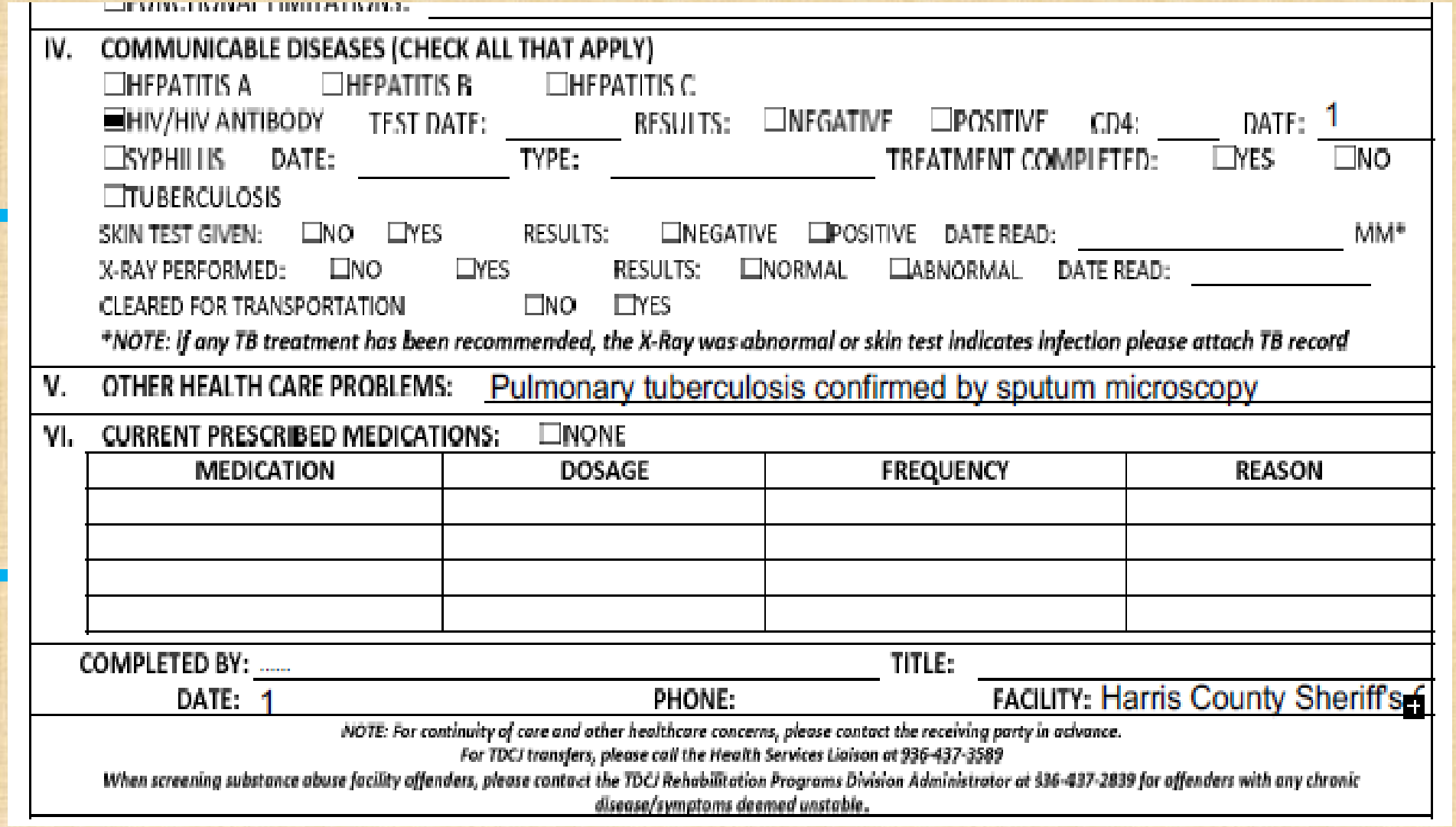
■ALLERGIES NKA ☐PENDING SPECIALTY CLINIC TYPE:

☐FUNCTIONAL LIMITATIONS:

Study #1

Incomplete

Empty



IV. COMMUNICABLE DISEASES (CHECK ALL THAT APPLY)

☐HEPATITIS A ☐HEPATITIS B ☐HEPATITIS C

■HIV/HIV ANTIBODY TEST DATE: _____ RESULTS: ☐NEGATIVE ☐POSITIVE CD4: _____ DATE: 1

☐SYPHILIS DATE: _____ TYPE: _____ TREATMENT COMPLETED: ☐YES ☐NO

☐TUBERCULOSIS

SKIN TEST GIVEN: ☐NO ☐YES RESULTS: ☐NEGATIVE ☐POSITIVE DATE READ: _____ MM*

X-RAY PERFORMED: ☐NO ☐YES RESULTS: ☐NORMAL ☐ABNORMAL DATE READ: _____

CLEARED FOR TRANSPORTATION ☐NO ☐YES

**NOTE: If any TB treatment has been recommended, the X-Ray was abnormal or skin test indicates infection please attach TB record*

V. OTHER HEALTH CARE PROBLEMS: Pulmonary tuberculosis confirmed by sputum microscopy

VI. CURRENT PRESCRIBED MEDICATIONS: ☐NONE

MEDICATION	DOSAGE	FREQUENCY	REASON

COMPLETED BY: ..... TITLE:

DATE: 1 PHONE: FACILITY: Harris County Sheriff's

NOTE: For continuity of care and other healthcare concerns, please contact the receiving party in advance.
For TDCJ transfers, please call the Health Services Liaison at 936-437-3589
When screening substance abuse facility offenders, please contact the TDCJ Rehabilitation Programs Division Administrator at 936-437-2839 for offenders with any chronic disease/symptoms deemed unstable.

AH Study #1 - Background

November 8, 2023

- Admitted to MHH for CAP or TB wu. CXR shows R midlung opacity - cavitary lesion new since 4/29/22
- QFT positive
- Bronchoscopy with BAL is AFB positive
- RIPE started at hospital
- Discharged to return to jail

AH Study #1

- DM2, Glaucoma Suspect, HIV on Genvoya, Thrombocytosis with splenomegaly, and Seizures
- 4 weeks, culture #1 negative, culture #2 PCR positive mtbc, RIFAMPIN RESISTANCE LIKELY
- Due to elevated AST / ALT Rifampin changed to Rifabutin
- Meds started on 01/13/24 at Jefferson County (2 wk break in meds)
- Planned for sputums last week of January

AH Study #1

- But where did she go?
- IM not there on 1/26. Nurses do not know where IM went
- Is she released or transferred
- Took a week to discover she returned to Harris County

- Unable to get final sputum culture “not ours”
- Could not find in NEDDS because “not ours”

AH Study #1

- Region found IM in NEDDS and discovered she was INH Resistant (G-10555) Genomic test marked NO (mark unknown if you don't know)
- Spoke to DSHS A. Costa who is tracking our INH Resistant disease. IM is connected to Beaumont
- IM was transferred to Hospital due to severity of illness

AH Study #1 – Challenges

- 1. Transferred on a holiday weekend
  - Poor communication
  - Limited staff at jail
  - No meds, and it takes several days to get meds
- 2. Our Jail Nurse works for CorrHealth, not the jail. She could not get info easily that IM was transferred rather than released

AH Study #1 – Challenges

- 3. Although IM is tied to Beaumont, we have not been notified of any need for exposure investigation.
- 4. Use of contacts (Regional level, State level) for gathering information

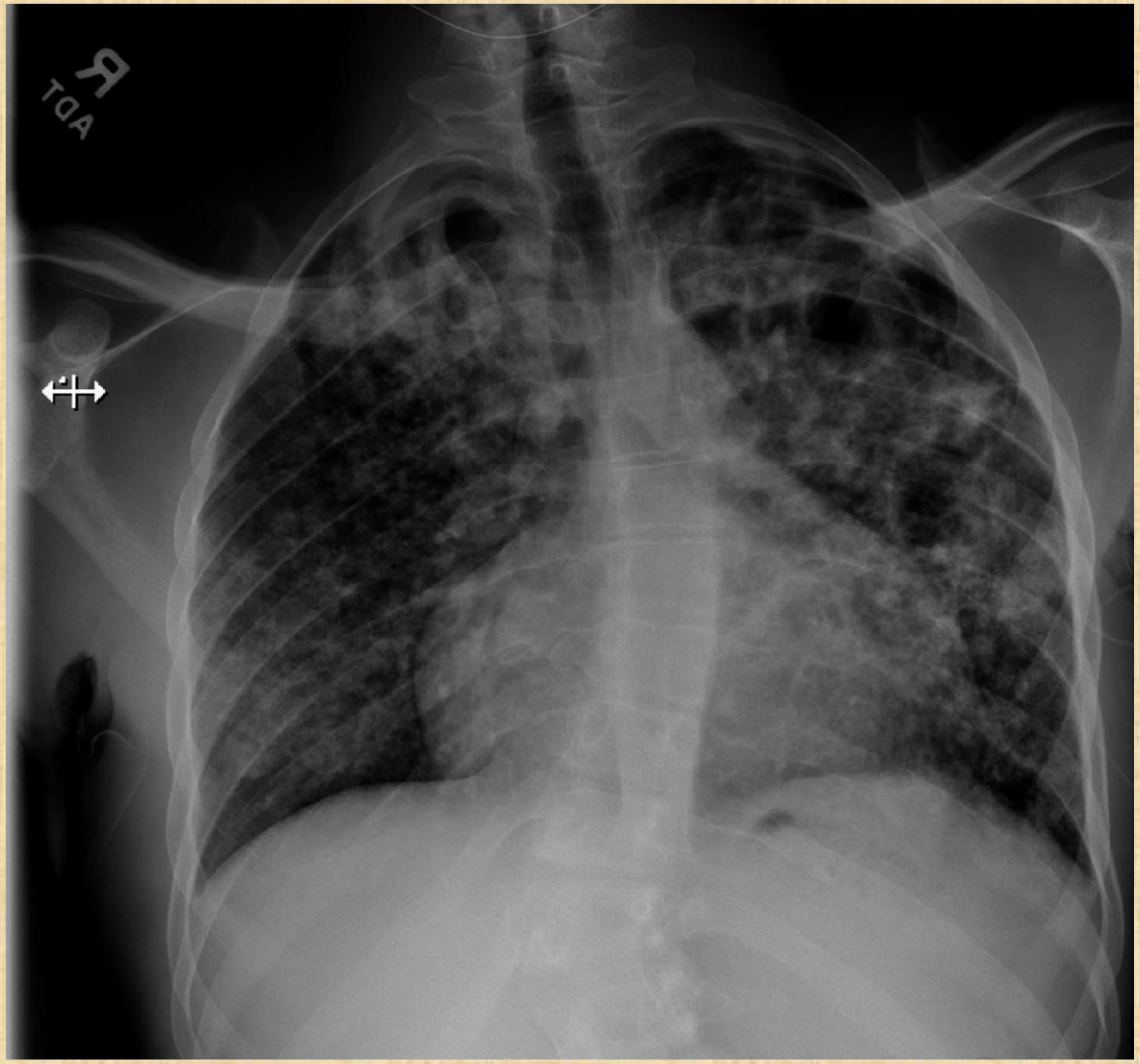
Patient Study #2

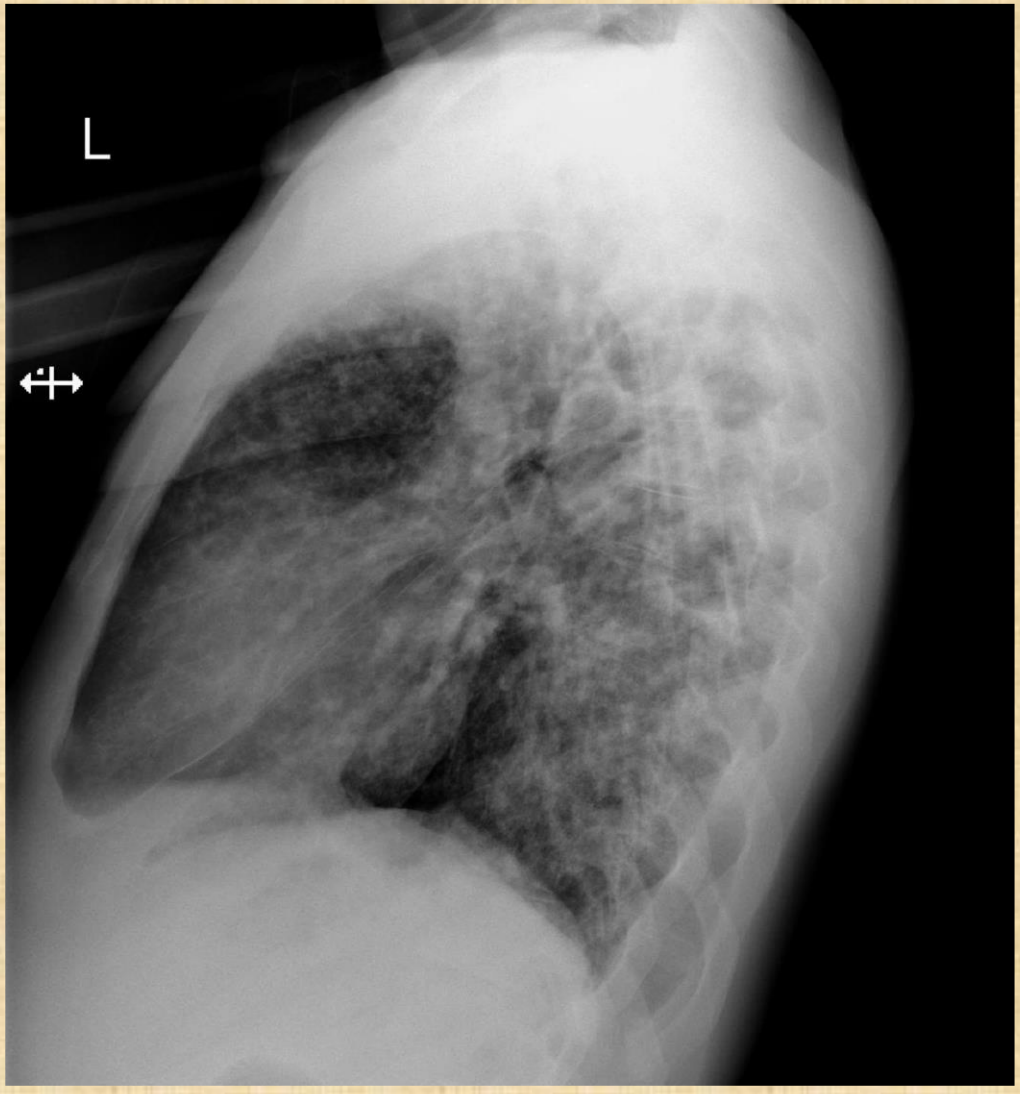
LSA Study #2 – 25 yo BM

- June 2023 - Hospital
- Cough x 3 weeks
- Febrile, easy fatigability x 2 months
- subj fevers and sweats
- weight loss 30-40 pounds
- Stayed in hospital 1 week

- Shelter insecure
- Smoker
- ETOH and Cocaine
- Grandma died 6 months ago
- No/poor phone

LSA Study #2





LSA Study #2

- He avoids the outreach worker
- Makes appointments and then not at spot
- Moves and leaves no forwarding address
- “I don’t want anyone in my business”

LSA Study #2

- Court ordered management process started July 11, 2023
- Took 2 months from start to having warrant
- But unable to locate the patient

LSA Study #2

- He is arrested 11-6-23 on unrelated charges
- He tells the nurse he has TB
- Sputum collected and started on meds (RMPE)
- 4 months later, IM tells nurse he is so proud, he has never taken meds for this long. Feels good, weight back on.

LSA Study #2

- April 8th, IM no longer in jail, he has been released

LSA Study #2

- Probation calls. We try to arrange a plan to pick him up, but patient never shows up
- Shows up at Probation 1 time, Clinic 0 times
- Spoke with TCID. They will take patients on probation and allow them to check in with their officer

LSA Lessons Learned Study #2

- Jail is Criminal system, Court ordered therapy is Civil, they don’t communicate automatically
- Nursing staff is not an employee of the jail, info did not get relayed to the correct people
- No one knew who was responsible to transport
- Ambulance willing, but if patient wants out they must release

LSA Lessons Learned Study #2

- Health Department Director called the Chief of Jail to discuss the IM release
- Chief and Emergency services now have an understanding for transport
- When we get Court-ordered Management papers we will forward to the Chief

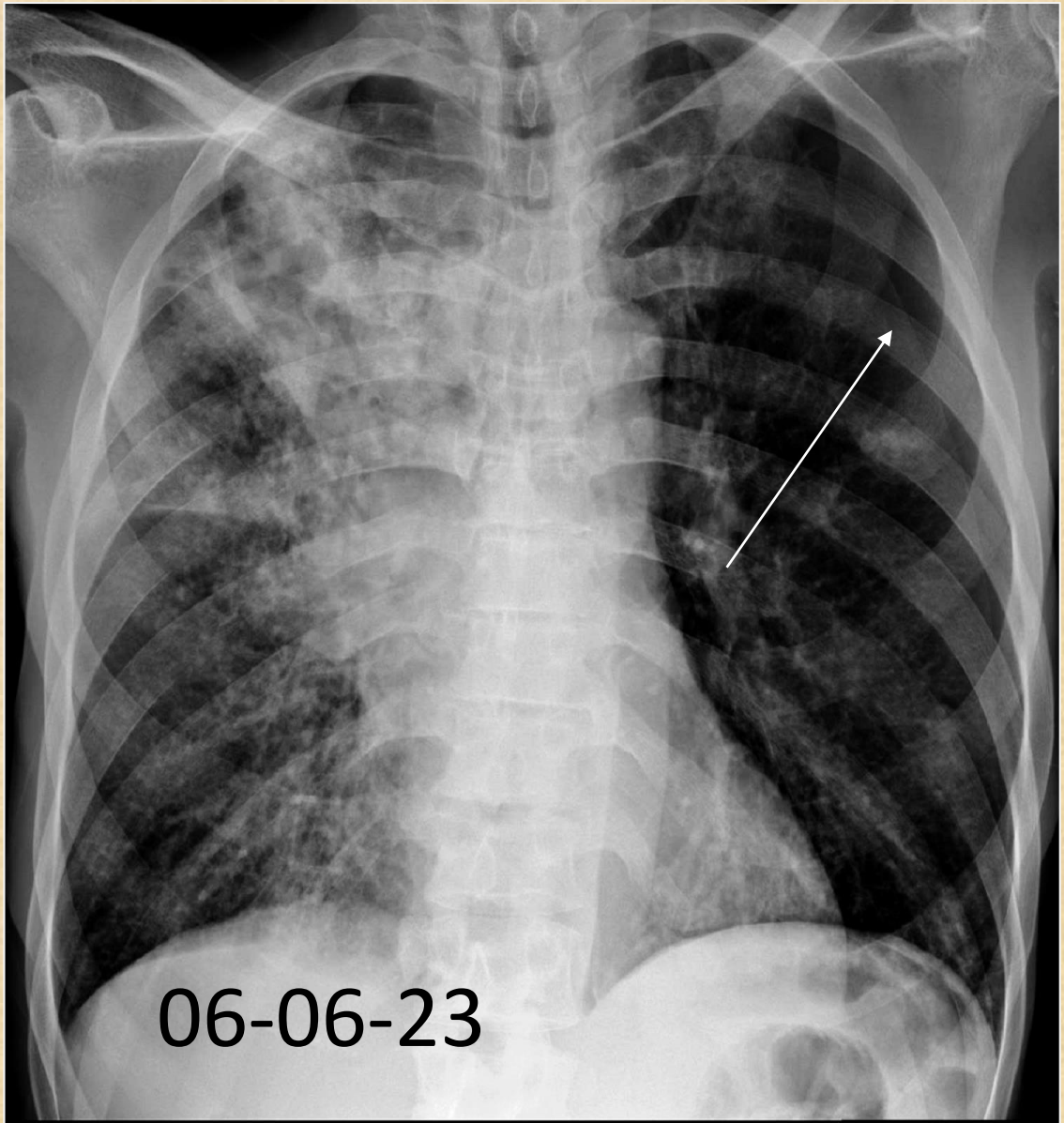
LSA Study #2 – The Rest of the Story

- IM arrested for unrelated issue 7/2
- He is in isolation until seen by their provider
- Chief of Jail now has the Warrant for Therapy
- Spoke to jail nurse – she has been there 3 weeks
- Requested sputum x 3, CXR, and RMPE
- He has missed 3 months, because meds started after 7/3 he is a restart

Patient Study #3

EW Study #3 54 yo

- 6-6-23 Presents with weakness, some sob, raspy cough, fever, confusion x 2 wks, admitted ICU
- B CAP
- L pneumothorax 15-20%

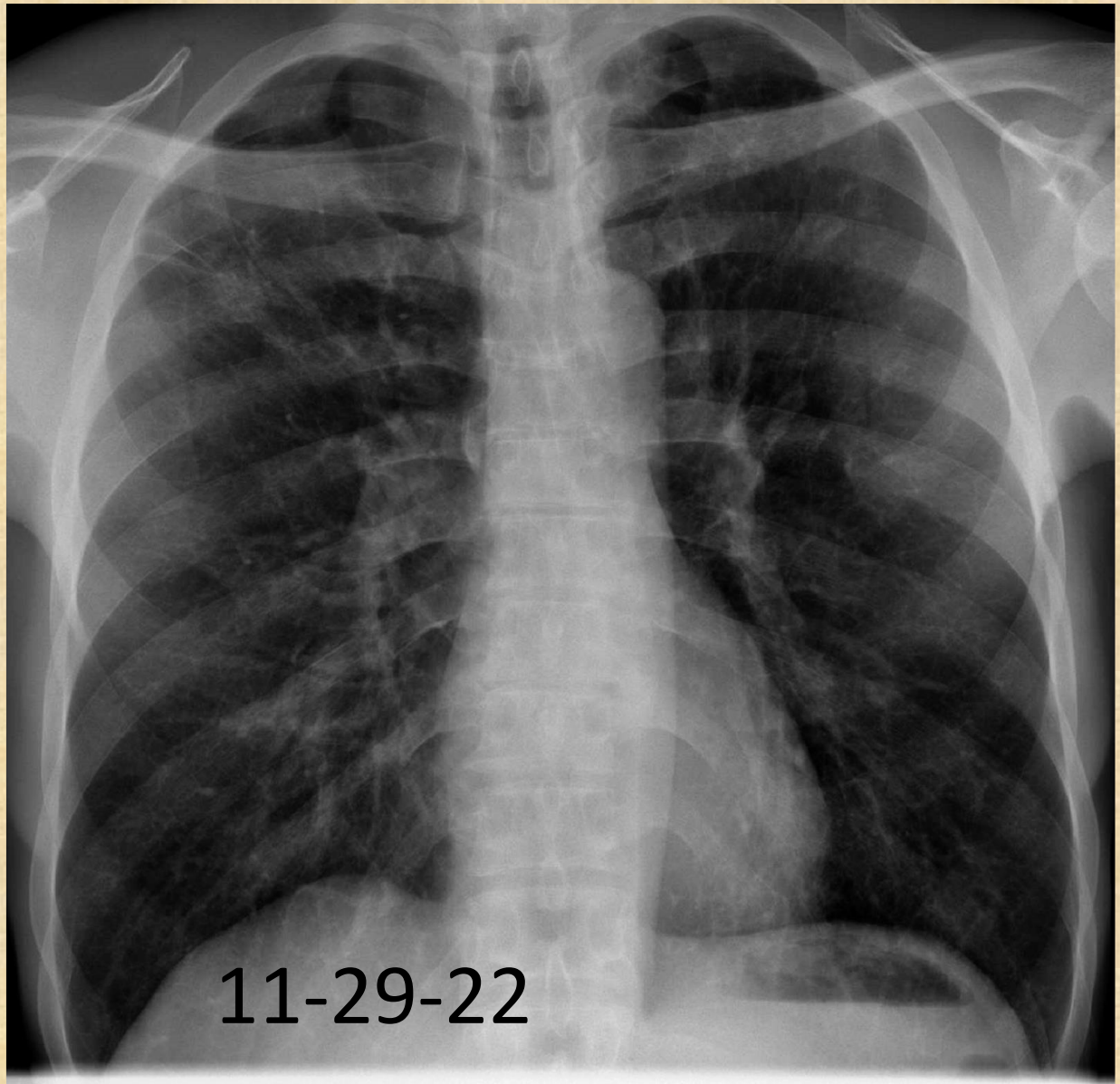


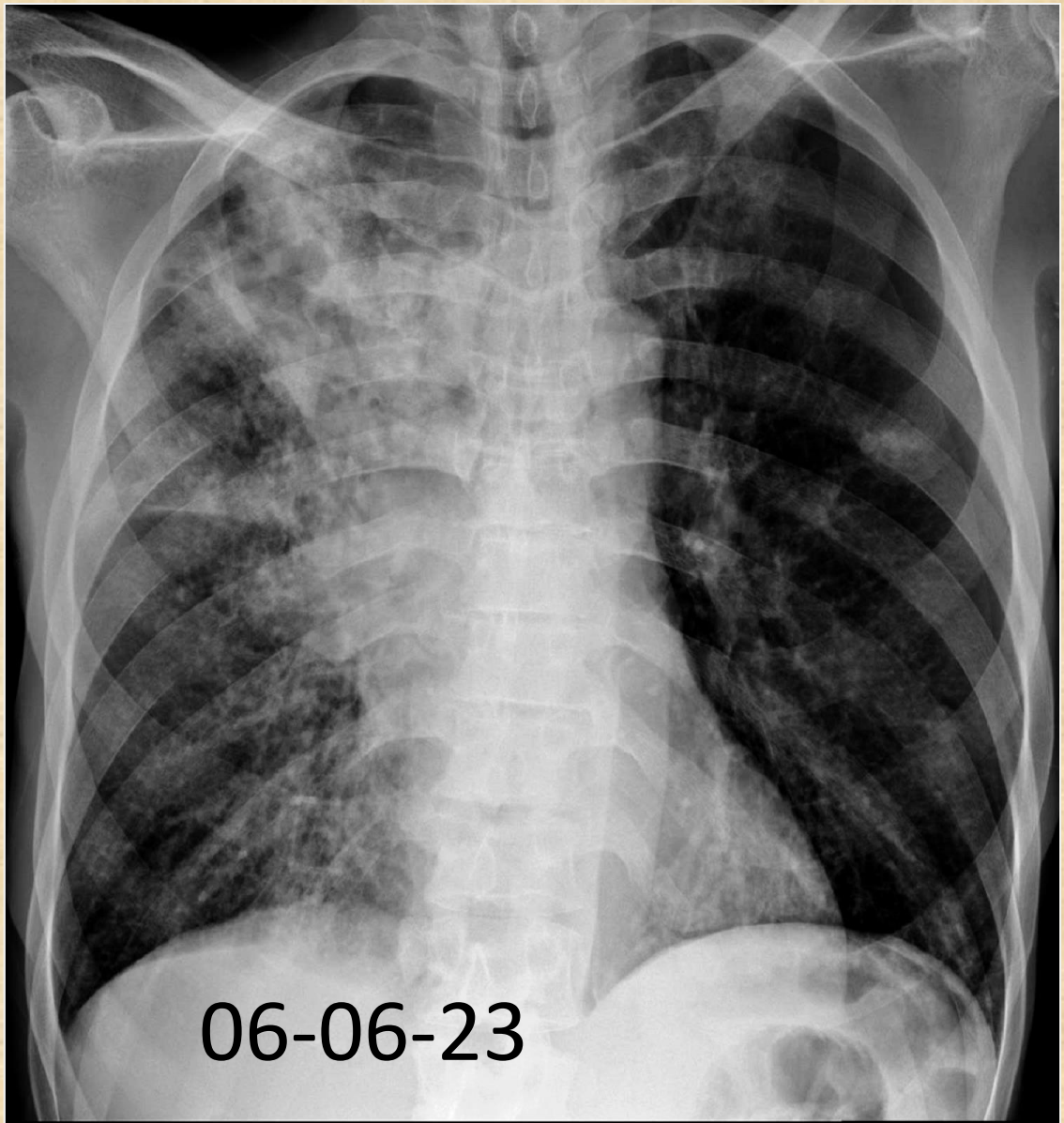
EW Study #3

- Hx Htn, Prev TB 2019, smoker, ETOH, THC, Cocaine, Hx IVDU, Shelter Insecure / lives btwn family
- CT Chest – Extensive lesions R, with Miliary type TB, pneumothorax, acute on chronic cavitary lesions

- 2019 – Went to TCID Came back, completed 9 mos at 3 x week (some misses, took longer)
- Same TB - Reinfection or Reoccurence ??
- 2023 – He wants to go to TCID again

EW Study #3



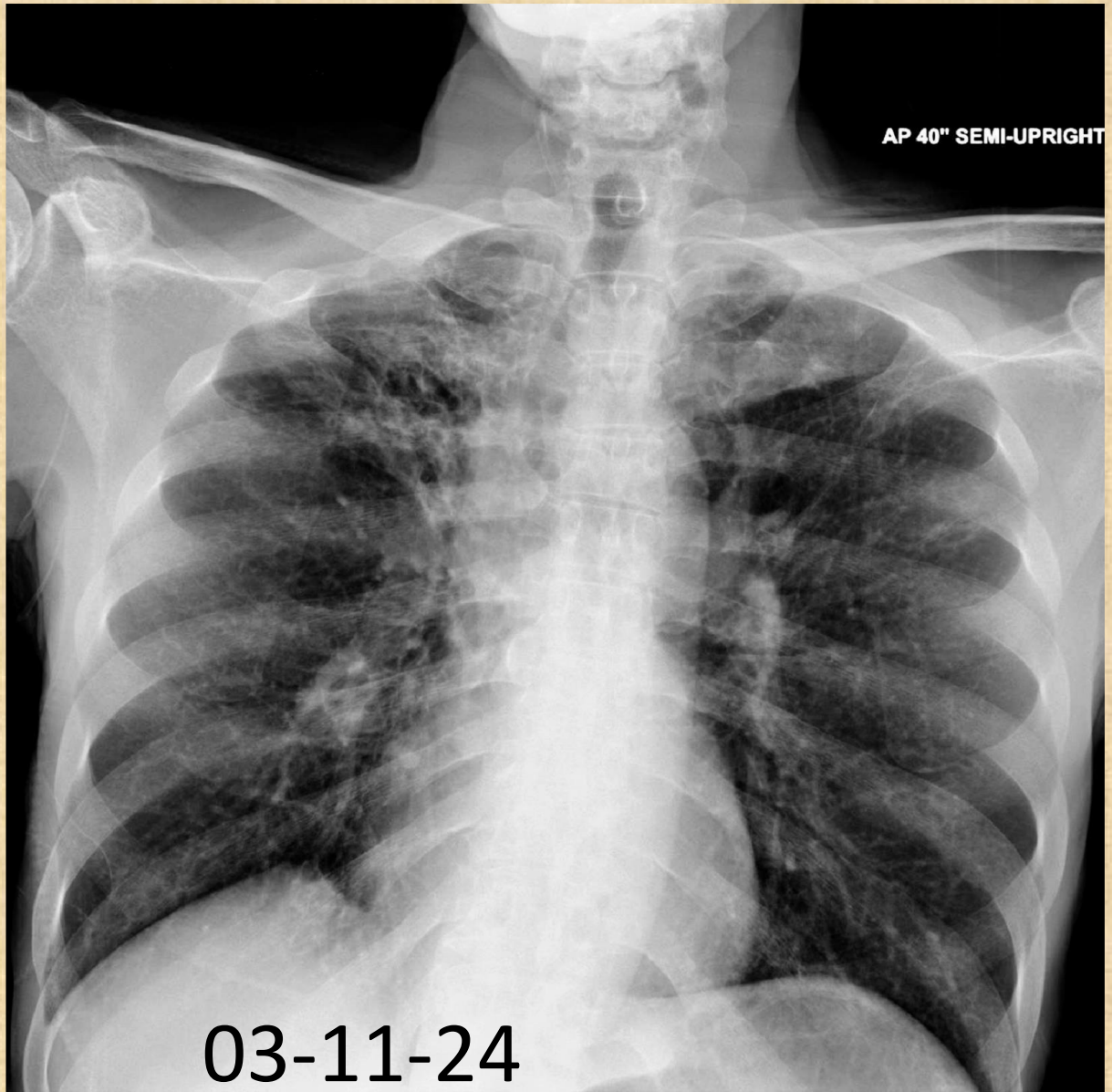


EW Study #3

- Goes to TCID 7-14-23 planning for 6 months
- He leaves AMA 11-01
- Shows up Beaumont HD on 11-06, takes 14 of 17 doses of meds in November
- As of 12-15 has only had 3 doses.
- Court-ordered Management Paperwork started d/t incomplete medication, high chance of disease progression

EW Study #3

- Papers filed with court in January
- February - court computer closed the case
- Refiled. Unable to find patient to be served
- Patient presents to ER on 3-11 with cough, congestion, wants back on his meds



EW Study #3

- Sputum 3-11-24
  MTB PCR detected
  Rifampin Resistance detected
- Not sick enough for admission, but does not come to HD

- April goes to other hospital
- Admitted x 5 days. AFB smear neg, culture neg ?good samples?
- No PCR done
- Released to go to HD
- Comes to HD for 2 weeks, gets meds for 1 week then gone again.

EW Study #3 – Lessons Learned

- Process servers can't serve patients in the ER
- After a certain amount of unsuccessful attempts notice is put in paper, person is considered served
- He was arrested 7/3 for unrelated issues
- Not placed in isolation
- Charges included parole, and we do not have the contact info

EW Study #3

- ***Then he is gone***
- *He was released 7/9*

And so the search continues

MTBC001328/G10555 in Texas

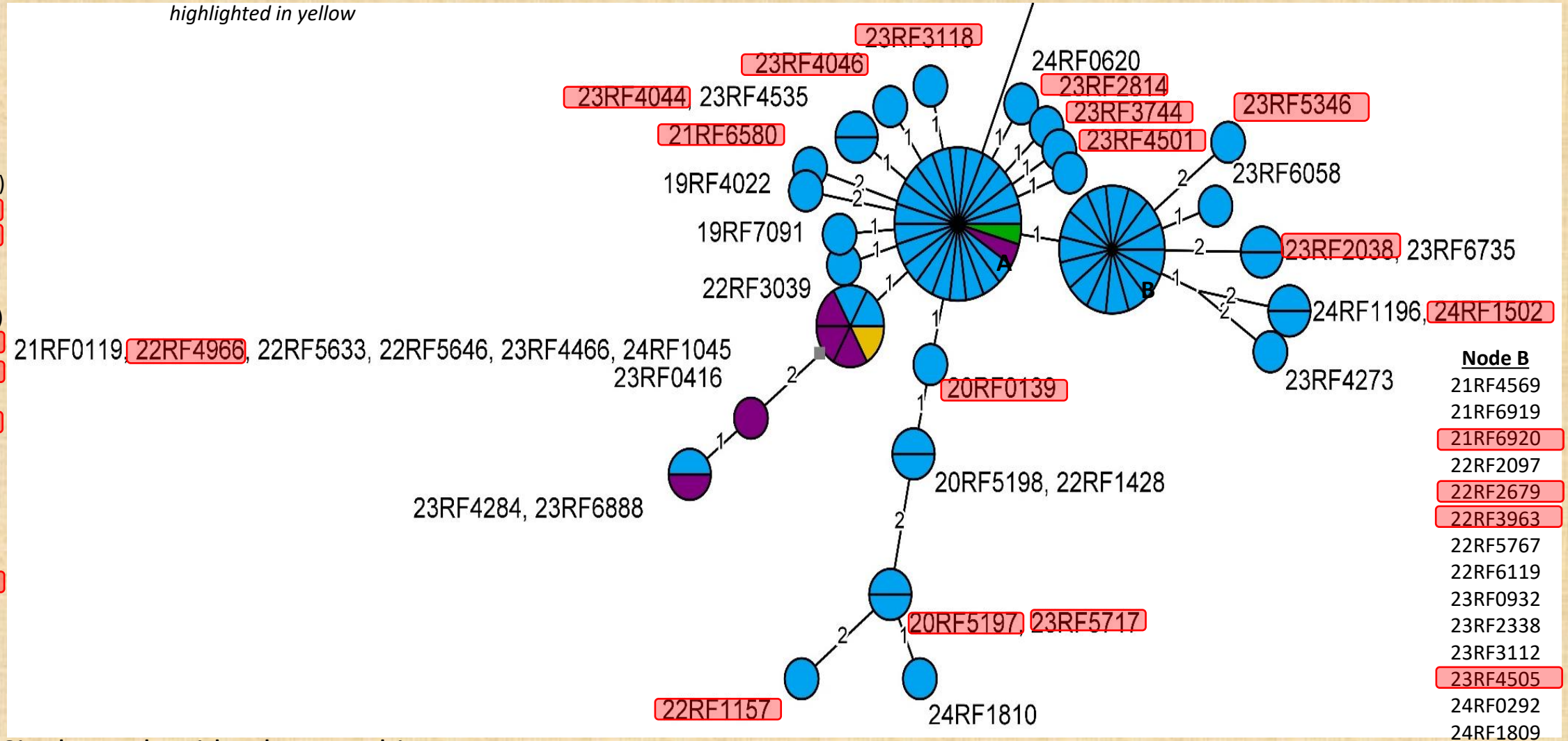
Results received 5/7/2024

- 25/72 people with contact to Corrections

TX
LA
IA
MI

Node A
18RF2854
18RF5944
18RF8614
19RF5185
19RF8438
20RF0147
20RF0885 (LA)
21RF4580
21RF4613
21RF7002
21RF7003
22RF0220 (IA)
22RF4976
23RF0852
23RF2062
23RF2318
23RF4272
23RF4879
23RF6164
23RF7417
23RF7729
24RF0632

Comparison updated with 24RF2062, highlighted in yellow



Node B
21RF4569
21RF6919
21RF6920
22RF2097
22RF2679
22RF3963
22RF5767
22RF6119
23RF0932
23RF2338
23RF3112
23RF4505
24RF0292
24RF1809
24RF1828

SNP = Single Nucleotide Pleomorphism

Conclusion

Lessons We have Learned

- Review the online jail roster every Monday to see if any of your missing people are in jail
- Testing inmates at least 3-5 days after booking allows for a higher % of the tests being read
- Partnering with Parole and Probation Officers has led to better patient cooperation
- Becoming better partners with nursing staff at jail improves understanding and care

Lessons We have Learned

- When possible, develop relationships with the Sheriff and the Judges, as you may need them
- Keep your director informed. They have connections and know who to contact
- Contact the Medical Director of the Jail and be part of their team

In conclusion, I hope you have gained better understanding of:

- The burden and challenge of Tuberculosis (TB) within corrections
- How we (Public Health) can help

I also hope you are able to leverage some of our lessons learned and if you have others, please let me know

Questions?

https://www.dshs.texas.gov/tuberculosis-tb

https://www.dshs.texas.gov/tuberculosis-tb/texas-dshs-tb-program-tb-forms-resources

https://www.dshs.texas.gov/tuberculosis-tb/tb-data-statistics

Texas Commission on Jail Standards, Chapter 273 Health Services