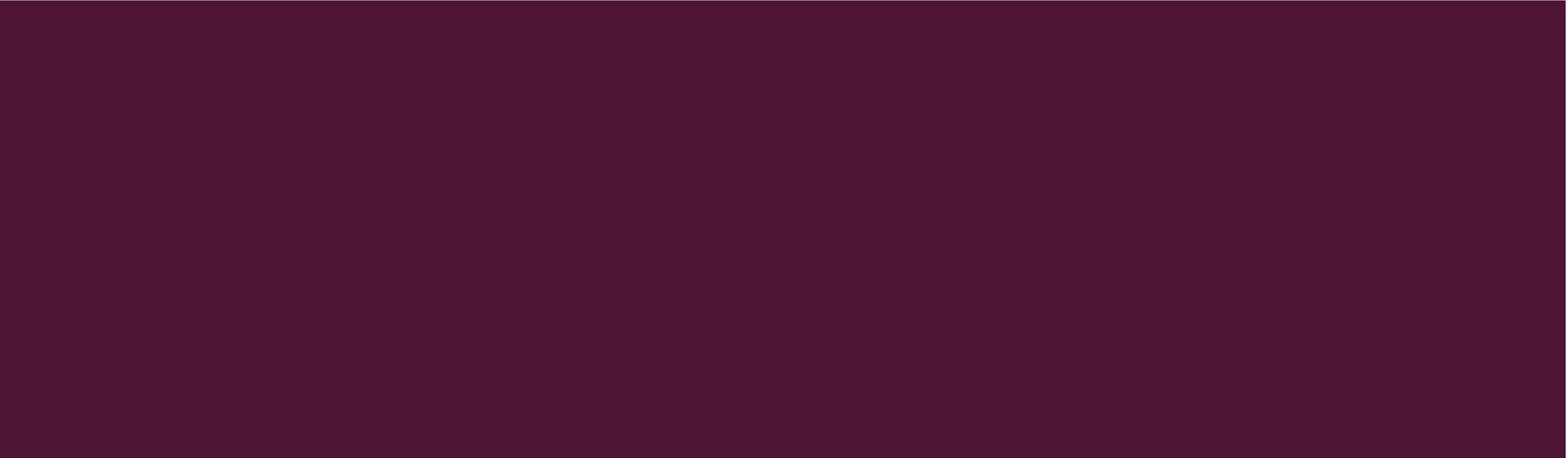




EPI TEAM SUPPORT: INCIDENT REPORTS, FLIGHT NOTIFICATIONS AND GENOTYPING RESULTS

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OBJECTIVES

- Define purpose of TB Incident Reports and when to submit
- Discuss DGMQ flight notifications, DNBs and BOLOs
- Show how to use the genotyping merged database and when to call Central Office



TB INCIDENT REPORTS

TB INCIDENT REPORTS (IR) ARE TOOLS FOR LOCAL/REGIONAL PROGRAMS TO LET THE CENTRAL OFFICE KNOW OF ANY LARGE-SCALE, MEDIA/POLITICALLY SENSITIVE OR CONCERNING EVENTS HAPPENING IN THEIR JURISDICTION.

THE POTENTIAL FOR AN EVENT TO BECOME CONCERNING IS JUST AS IMPORTANT!

WHEN TO SUBMIT AN INCIDENT REPORT

- Criteria for an event to become a TB Incident:
 - Any exposure in a child daycare or school (K-12)
 - 50 or more contacts at an exposure site (i.e. workplace, congregate setting, church, college)
 - Any event that is potentially media- or politically-sensitive
 - Issues concerning to your program

STEPS TO COMPLETING AN INCIDENT REPORT FORM

- The local/regional TB program will fill-out the IR form *completely* and place on the PHIN.
- The local/regional TB program will email TBEpiEvaluation@dshs.state.tx.us with the location of the documents on the PHIN.
- Central Office Epi Team will review the form as a team to determine if it meets the criteria for becoming a TB Incident.
- Central Office Epi Team will email the local/regional TB program to set-up a phone meeting to discuss the event.
- Weekly updates to the incident may be required if the incident becomes a TB Alert.

Incident Report Information	
Name of Incident: Click here to enter text.	Type of Incident Report: <input type="checkbox"/> Initial <input type="checkbox"/> Update <input type="checkbox"/> Final
Incident Report Submission Date: Click here to enter a date.	City and County of Incident: Click here to enter text.
	Region: Click here to enter text.
Reporter Information	
Name of Reporting Facility: Click here to enter text. Is this facility a congregate setting: <input type="checkbox"/> Yes <input type="checkbox"/> No	Address: Click here to enter text.
Name of Reporting Person: Click here to enter text.	Phone Number: Click here to enter text.
Title: Click here to enter text.	E-mail: Click here to enter text.
Case/Suspect Information	
Patient Initials: _____ Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female DOB: ___/___/___ Address: _____ City: _____ County: _____ Zip: _____	TST performed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown TST Test Date: ___/___/___ TST Read Date: ___/___/___ Results in mm: _____ mm <input type="checkbox"/> Positive <input type="checkbox"/> Negative
Symptoms: Onset Date: ___/___/___ Date Symptoms ended: ___/___/___ <input type="checkbox"/> Cough <input type="checkbox"/> Chills <input type="checkbox"/> Hemoptysis <input type="checkbox"/> Fever <input type="checkbox"/> Fatigue <input type="checkbox"/> Loss of appetite <input type="checkbox"/> Night Sweats <input type="checkbox"/> Weight loss <input type="checkbox"/> Other, please specify: _____	IGRA results: <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Indeterminate <input type="checkbox"/> Unknown <input type="checkbox"/> Pending <input type="checkbox"/> Not Performed IGRA Test Date: ___/___/___
Additional comments on symptoms: <div style="border: 1px solid black; height: 80px; width: 100%;"></div>	NAAT results: <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Unknown <input type="checkbox"/> Pending <input type="checkbox"/> Not Performed NAAT Test Date: ___/___/___
	AFB Specimen: _____ Collection Date: ___/___/___
	AFB Smear results: <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Unknown <input type="checkbox"/> Pending <input type="checkbox"/> Not Performed Classification: <input type="checkbox"/> <1 <input type="checkbox"/> 1+ <input type="checkbox"/> 2+ <input type="checkbox"/> 3+ <input type="checkbox"/> 4+
Chest X-ray performed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Date of CXR: ___/___/___ Results: <input type="checkbox"/> Abnormal <input type="checkbox"/> Normal Chest X-ray indicates Cavitation? <input type="checkbox"/> Yes <input type="checkbox"/> No	AFB culture result: <input type="checkbox"/> AFB found: <i>M. tuberculosis</i> complex <input type="checkbox"/> AFB found: Non- <i>M. tuberculosis</i> complex <input type="checkbox"/> No AFB found <input type="checkbox"/> Pending <input type="checkbox"/> Not Performed
Started on treatment? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Drug start date: ___/___/___ Drug end date: ___/___/___ Type of Drugs: <input type="checkbox"/> INH <input type="checkbox"/> RIF <input type="checkbox"/> PZA <input type="checkbox"/> EMB <input type="checkbox"/> Other, please specify: _____	Additional laboratory comments (i.e. results and dates for extra specimens collected): <div style="border: 1px solid black; height: 80px; width: 100%;"></div>
Case Died? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Date of Death: ___/___/___ Was TB diagnosis at death? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Was TB cause of Death? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Infectious? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, is this person on respiratory isolation? <input type="checkbox"/> Yes <input type="checkbox"/> No Infectious period: ___/___/___ to ___/___/___

INCIDENT REPORTS FY2015

Fiscal Year 2015:² TB Incidents Reported to DSHS Central Office

Exposure Location	#Cited Exposure Locations ¹	Submitting Jurisdictions	# of Incident Reports
Elementary School	3	Angelina	1
Middle School	2	Austin	9
High School	4	Dallas	2
College	8	Denton	1
Hospital	16	El Paso	10
Nursing Home/ Assisted Living	1	Harris	3
Workplace	23	Hidalgo	19
Jail/Community Corrections	15	Houston	15
Other	19	Laredo	2
Total	91	Region 11	4
		Region 2/3	1
		Region 4/5	2
		Tarrant	6
		Williamson	1
		Total	76

Note¹: In FY 2015, 76 incident reports were sent to the TB Central Office. These incident reports are broken down by Exposure Location and Submitting Jurisdiction. Among the 76 incident reports, 91 total exposure locations are mentioned in the incident report. 15 TB patients listed more than one exposure location cited in their incident report (e.g. one TB patient had both a workplace and a college investigation).

Note²: fiscal Year=September 1 - August 31, 2015.

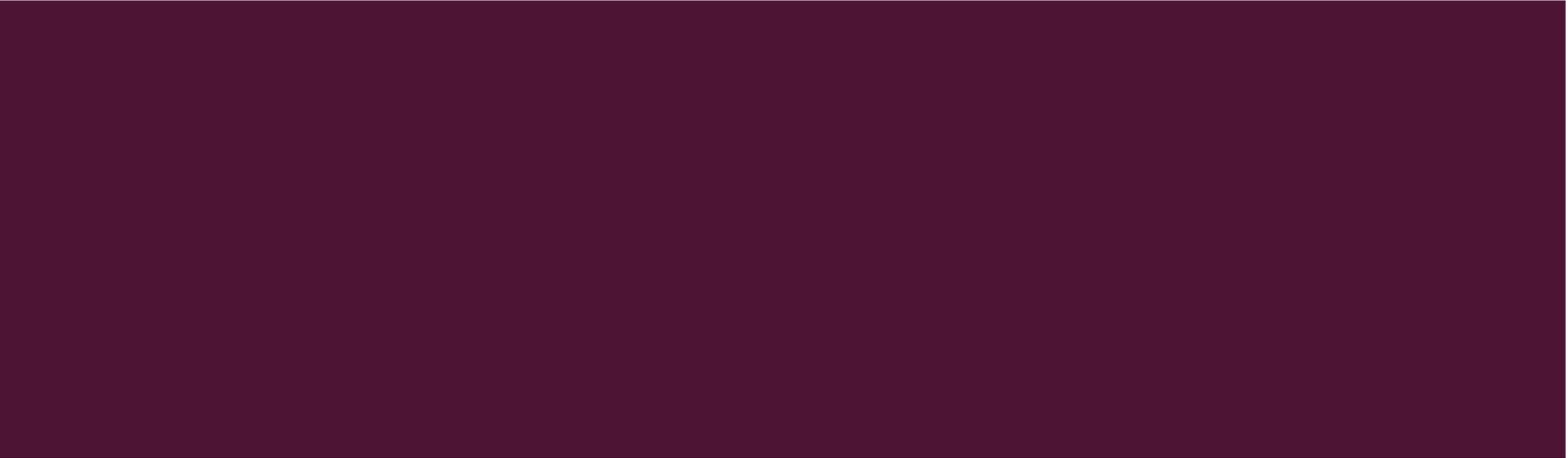
SUMMARY

- When in doubt of whether a TB event should become an incident report: call the TB Branch!
- Contact information:
 - Casandra Jones: (512) 533-3162
 - Shared inbox: TBEpiEvaluation@dshs.state.tx.us



FLIGHT NOTIFICATIONS

DGMQ CONTACT INVESTIGATIONS, DNBS AND BOLOS



DGMQ FLIGHT CONTACT INVESTIGATION

- Central Office receives information from CDC Quarantine Station including:
 - Flight information, date of arrival, arrival city, length of flight
 - Index case data including clinical and lab information
 - Contact information
 - Who to test and their contact information
 - Blank form for TB screening
- Central Office staff receive report through EpiX and determine residence of contact
 - Forward information via PHIN to appropriate local/regional TB Program

DGMQ FLIGHT CONTACT INVESTIGATION

- Local/regional Responsibilities
 - Plans and prepares TB evaluation of airline contact(s)
 - Report results to the TB Branch within two weeks
 - Place completed forms on PHIN
 - Email TBEpiEvaluation to alert Epi Team of forms



DO NOT BOARD

A PUBLIC HEALTH TOOL



DO NOT BOARD

- Not law enforcement, but uses similar principles.
- DNB: Prevents people who meet specific criteria from obtaining a boarding pass for any flight inbound to, outbound from or within the US.
 - Does not prevent passengers from boarding ships, trains or buses
 - Prompts notification by DHS/TSA that an individual attempted boarding
 - Allows CDC and state/local programs to respond

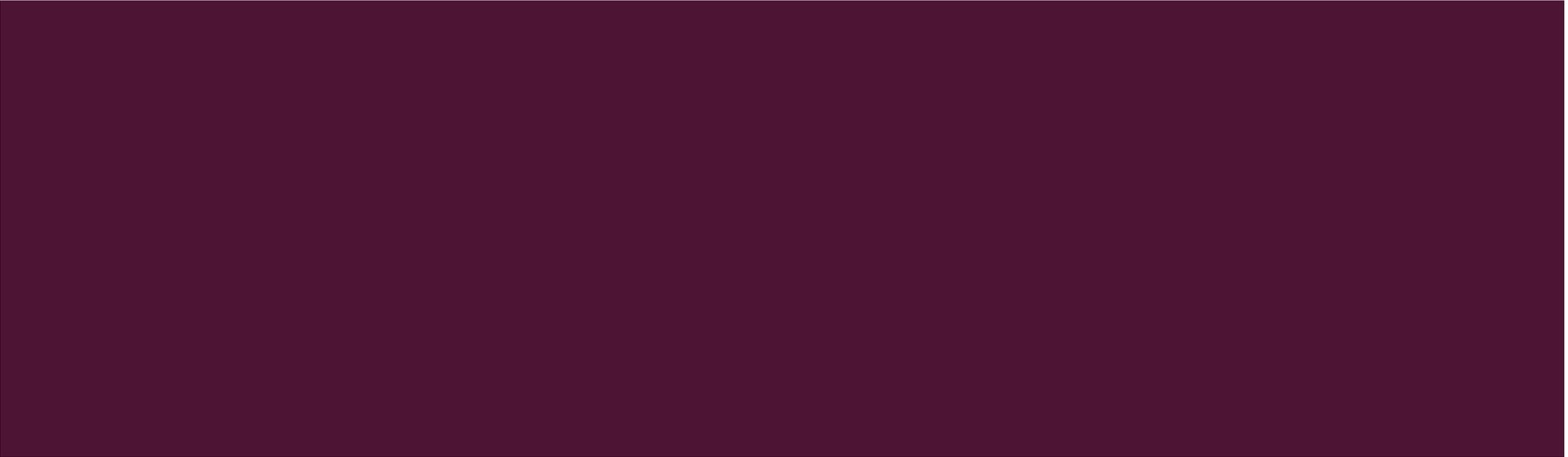
DO NOT BOARD

- Applies to U.S. citizens as well as non-U.S. citizens
- DNB list is not part of the “No Fly” List
- International notifications
 - Canada and Mexico notified of every DNB action
 - Other countries notified per protocol



BE ON THE LOOKOUT

“BOLO”



BOLO

- Applies to international arrivals at U.S. airports, seaports and land borders
- Alerts Customs officers of a person who poses a public health threat who attempts to enter the U.S.
- Prompts CDC quarantine staff to investigate when such persons attempt to enter the U.S.

TRAVEL RESTRICTION CRITERIA

The patient must meet the first criteria and then one or more of the three criteria before being placed on the Do Not Board travel restriction or Lookout list.

Infectious or believed to be exposed and / or:

1. Not aware or non-compliant
2. Risk to travel out of state or country
3. Part of an outbreak investigation

THE ROLE OF REGIONAL/LHD TB PROGRAMS IN DNB/BOLO

- Regional/LHD TB programs submit DNB/BOLO requests to the TB Branch.
 - Send initial notification to TBEpiEvaluation@dshs.state.tx.us
 - All additional information should be sent through the PHIN
- Local/Regional TB programs must provide the following data:
 - Identification information
 - Clinical history
 - Social history
 - Prior efforts of the local or regional HD to achieve adherence
 - Evidence supporting intention to leave the country
- Inform the individual verbally once the DNB/BOLO has been issued. CDC is responsible for written notification.
- Notify the TB Branch as soon as removal criteria are met

THE ROLE OF CENTRAL OFFICE

- Coordinate with the CDC Quarantine Station.
- Coordinate conference call with Local Contractor (LC) and CDC.
- Agree on criteria for removal from the DNB/BOLO list before the individual's placement.
- To notify the CDC Quarantine Station as soon as the criteria for removal are met.



GENOTYPING SUPPORT

WHAT IS GENOTYPING?

GENOTYPING: LAB APPROACH USED TO ANALYZE GENETIC MATERIAL OF M.TUBERCULOSIS

GENOTYPING USES PORTIONS OF THE GENOME TO IDENTIFY DIFFERENT STRAINS OF M.TUBERCULOSIS

TOOL TO UNDERSTAND TRANSMISSION OF TUBERCULOSIS

WHEN VIEWING INITIAL GENOTYPING RESULTS FOCUS ON GENTYPE

WHAT IS GENOTYPING?

- When combined with epidemiological data, can identify persons with TB disease involved in same chain of recent transmission
- Do not function as a diagnostic measure
- Once linked to patient data by a member of the Central Office Epi team, results are found in the CDC database called Tuberculosis Genotyping Information Management System (TB GIMS)

PCRType	GENType	MIRU	MIRU2
PCR00002	G00010	223325173533	444534423428
PCR00002	G00012	223325173533	445644423328
PCR00002	G01045	223325173533	--36-442312-
PCR00002	G01046	223325173533	--4--4423428
PCR00002	G01048	223325173533	--45-4423428
PCR00002	G01049	223325173533	--53-4423228
PCR00002	G01050	223325173533	--56-4422327
PCR00002	G01053	223325173533	--56-4423328
PCR00002	G01055	223325173533	-44534423428
PCR00002	G01061	223325173533	244242223337
PCR00002	G01063	223325173533	244342223337

USES

- Detect false-positive culture results
- Enhance investigations
- Distinguish relapse from new infection
- Monitor trends and evaluate TB control program
- Detect *M. bovis* and *M. bovis* BCG

GENOTYPING RESPONSIBILITIES

- Surveillance
 - Creation of suspect records
 - Assigns RVCT number once minimum criteria met
 - Enters case information and transmits to CDC
- DSHS Laboratory
 - Receives specimens (isolates or raw samples)
 - Processes specimens/cultures and sends to CDC
 - Resource for technical questions and laboratory expertise

Epidemiology and Evaluation Team

TBEpiEvaluation@dshs.state.tx.us

- Links cases to genotyping results
- Database sharing related to genotyping
- Genotype inquiries (results, interpretation)
- TBGIMS access
- Lead for cluster alert evaluations

SPECIALIZED RESOURCES

- False-Positive Investigations Workgroup
- Cluster Alert Workgroup

Both groups:

- Contain experts from multiple departments
 - Soon to include representative from regions/locals
- Serve to address questions/concerns
 - Internally (Central Office) and externally (HSRs/locals)
- Working to create policies/guidance

LOCAL/REGIONAL TB PROGRAM RESPONSIBILITIES

- Complete RVCT in timely manner
- Submit lab reports and facilitate submission of specimens to DSHS
- View suspect records in TBPAM
- Monitor clusters
- Communicate with TB Program
 - Training needs
 - Resource gaps
 - Prior to outbreak