

AGENDA

- ❖ Program Announcements: Amanda Khalil
- ❖ Epi Update: Laura Young and Jane Tingley
- ❖ TB in Pediatrics: Dr. Tania Thomas
- ❖ Questions

WELCOME!

New TB Program team member: Leah Breitung!

- TB Surveillance Epidemiologist
- RVCT (Report of Verified Case of Tuberculosis)

ARE YOU INVOLVED WITH YOUR DISTRICT'S COVID-19 RESPONSE?

Please chat your response into the chat box

TRAINING

- ❖ April 9: New TB Nurse Training – POSTPONED
 - Rescheduled for Thursday, July 30 (previously registered have first priority)
 - Additional session scheduled for Wednesday, October 14
- ❖ Biennial Nurse Meeting: Late September/Early October
- ❖ Webinars under development – POSTPONED
 - New LTBI Treatment Recommendations
 - Screening and Testing of Health Care Personnel

WOULD YOU BE INTERESTED IN & AVAILABLE TO PARTICIPATE IN TB PROGRAM WEBINARS IN THE NEXT MONTH?

Please chat your response into the chat box

CONTINUITY OF OPERATIONS

- ❖ Guidance for TB teams emailed on Monday, March 16
- ❖ Majority of Central Office Team teleworking
- ❖ Instead of faxing send via encrypted email
- ❖ Don't hesitate to reach out!
 - ❖ We are here to support you in any way you can.

ALTERNATIVE HOUSING & INCENTIVE PROGRAM

- ❖ Moving to online submission
 - Link on the TB Program Website > Forms for LHD page
- ❖ Working to also move requests for second line drugs online

Alternative Housing and Incentive Program Request Form

Requests for Alternative Housing and Incentive Program (AHIP) participation should be submitted using this form.

This form should be completed by the Nurse Case Manager or designee. Note, submitting this form does not guarantee assistance will be provided.

Is this an urgent request for assistance? If approval is needed immediately, please check this box and call the TB Help Line (800-688-7265). Yes No

Complete as much information as possible. You will receive a response within 1-2 business days after review by the TB program.

Client Name:

Explain what resources have been explored for assistance locally:

Criteria for Participation:

Diagnosis of presumptive or confirmed TB

Requires isolation (Required for housing assistance)

ICM supporting or consulting on medical management

Signed Directly Observed Therapy Agreement and compliant with DOT

Client at risk for unstable or unsafe housing

Demonstrates financial need

Tuberculosis Epidemiology: A Global, National and Virginia Update

LAURA R. YOUNG, MPH, CIC
TB EPIDEMIOLOGIST/SURVEILLANCE COORDINATOR
JANE TINGLEY, MPH
LTBI EPIDEMIOLOGIST
MARCH 24, 2020

Overview

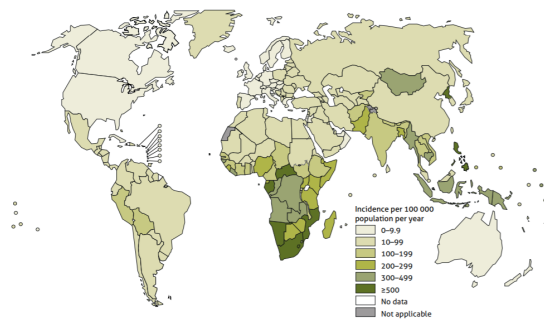
Global Tuberculosis (TB) Update
National TB Update*
State TB Update*

**Please note that all 2019 data is provisional*

Global Tuberculosis Incidence

- In 2018 there were an estimated 10 million new TB cases.
- TB is one of the top 10 causes of death worldwide
- Eight countries accounted for 66% of the new cases: India, China, Indonesia, the Philippines, Pakistan, Nigeria, Bangladesh, and South Africa
- Nearly one in ever four people in the world is infected with latent TB.

Estimated TB incidence rates, 2018



1.5 MILLION TB DEATHS
INCLUDING 251 000 TB DEATHS AMONG PEOPLE WITH HIV

58 million lives saved between 2000 and 2018
TB deaths fell by 38% in the same period

Global tuberculosis report 2019. Geneva: World Health Organization, 2019. Licence: CC BY-NC-SA 3.0 IGO.

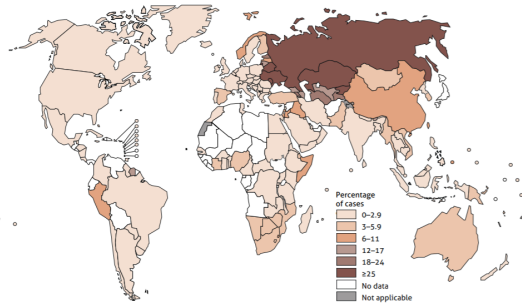
THE END TB STRATEGY

VISION	A world free of tuberculosis – zero deaths, disease and suffering due to tuberculosis			
GOAL	End the global tuberculosis epidemic			
INDICATORS	MILESTONES		TARGETS	
	2020	2025	SDG 2030	END TB 2035
Reduction in number of TB deaths compared with 2015 (%)	35%	75%	90%	95%
Reduction in TB incidence rate compared with 2015 (%)	20% (<85/100 000)	50% (<55/100 000)	80% (<20/100 000)	90% (<10/100 000)
TB-affected families facing catastrophic costs due to TB (%)	Zero	Zero	Zero	Zero

Global MDR/RR-Tuberculosis

- There were an estimated 484,000 incident cases of MDR/RR-TB in 2018.
- 50% of cases were in India (27%), China (14%) and the Russian Federation (9%).
- There were about 214,000 deaths from MDR/RR-TB in 2018.

Percentage of new TB cases with MDR/RR-TB*



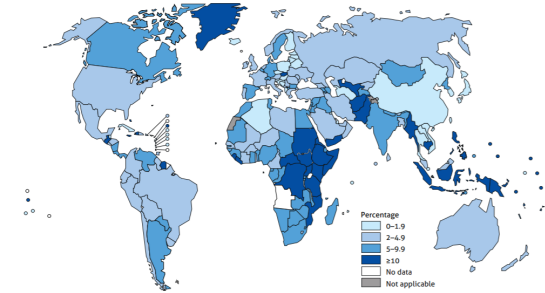
* Percentages are based on the most recent data points for countries with representative data from 2004 to 2019. Model-based estimates for countries with data before 2004 are not shown. MDR-TB is a subset of RR-TB.

Global tuberculosis report 2019. Geneva: World Health Organization, 2019. Licence: CC BY-NC-SA 3.0 IGO.

Pediatric Tuberculosis

- Children accounted for an estimated 10% of TB cases in 2018.
- Among HIV-negative TB related deaths in 2018, 14% were children and among HIV-positive TB-related deaths, 13% were children.
- Notification data likely underrepresent TB incidence in children
- Globally in 2018, an estimated 1.3 million children aged under 5 years were household contacts of bacteriologically confirmed pulmonary TB cases.

Percentage of new and relapse TB cases that were children (aged <15), 2018

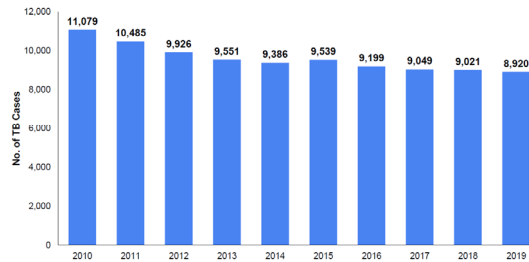


Global tuberculosis report 2019. Geneva: World Health Organization, 2019. Licence: CC BY-NC-SA 3.0 IGO.

Tuberculosis in the United States, 2019

- Provisional 2019 United States case count: 8,920
- Provisional 2019 United States case rate: 2.7 per 100,000 population.
- This is the lowest rate and number of TB cases on record.

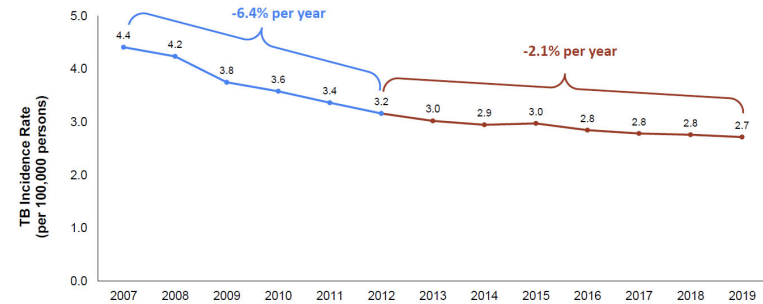
TB Case Count* — United States, 2010–2019



*Based on provisional NTSS data as of March 3, 2020.

World TB Day — March 24, 2020. MMWR Morb Mortal Wkly Rep 2020;69:281. DOI: <http://dx.doi.org/10.15585/mmwr.mm6911a1>

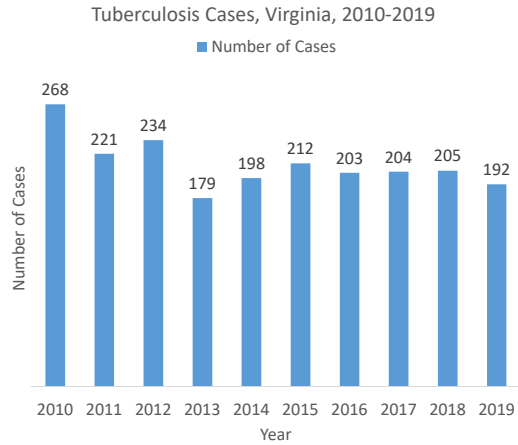
Average Annual Percent Change in TB Incidence Rate* — United States, 2007–2019



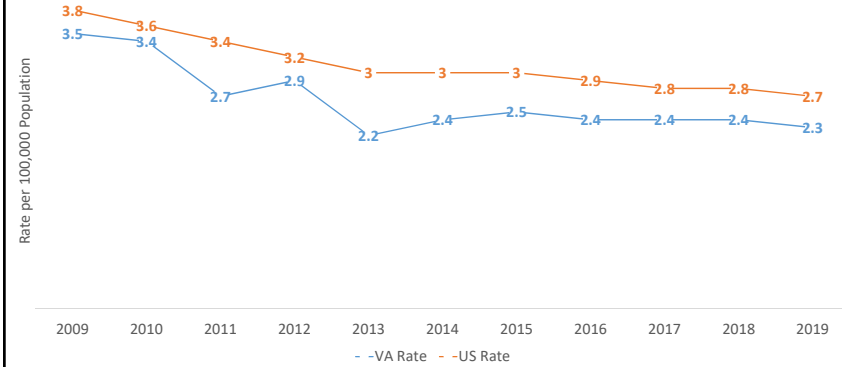
World TB Day — March 24, 2020. MMWR Morb Mortal Wkly Rep 2020;69:281. DOI: <http://dx.doi.org/10.15585/mmwr.mm6911a1>

Tuberculosis in Virginia, 2019

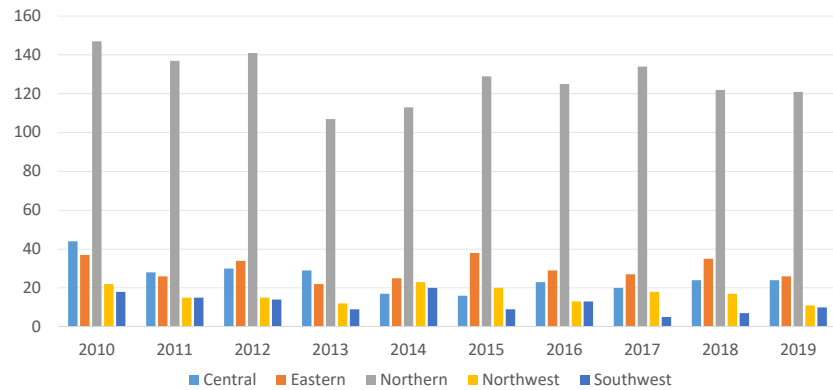
- 192 cases in 2019
- Rate of 2.3 per 100,000 population



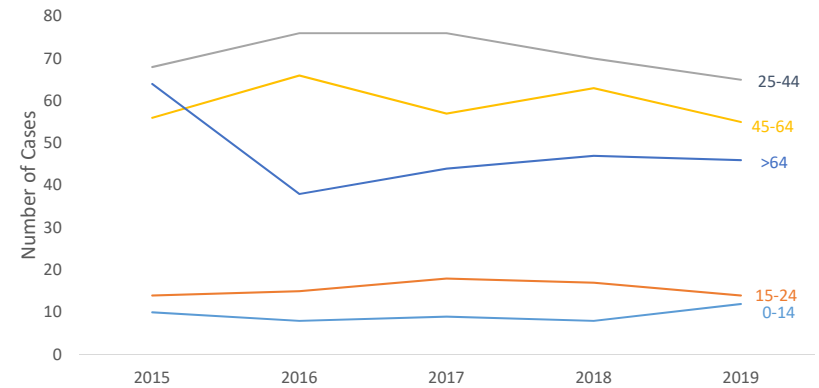
Tuberculosis Incidence Rate, Virginia and the U.S., 2009-2019



Tuberculosis Case Distribution by Region, Virginia, 2009-2018



Age Group of TB Cases in Years, Virginia, 2015-2019



Pediatric Cases in Virginia, 2019

12 pediatric cases in 2019 (<15 years)

- Age range: infant – nine years old
- 50% were under the age of three
- 50% were contacts of active TB cases
- 75% were U.S.-born

Additional six cases in teenagers (16-19 years)

Window Treatment After Exposure to Tuberculosis

Children less than 5 years of age are at high risk of rapidly developing severe forms of TB disease after infection.

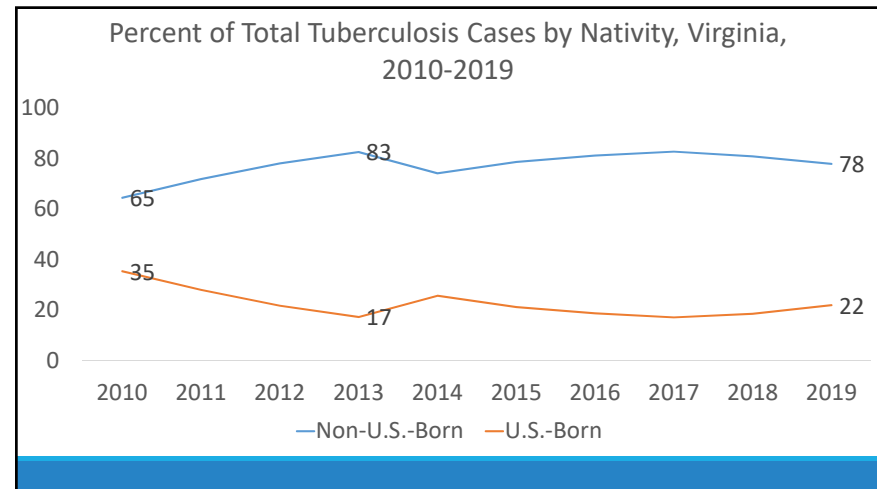
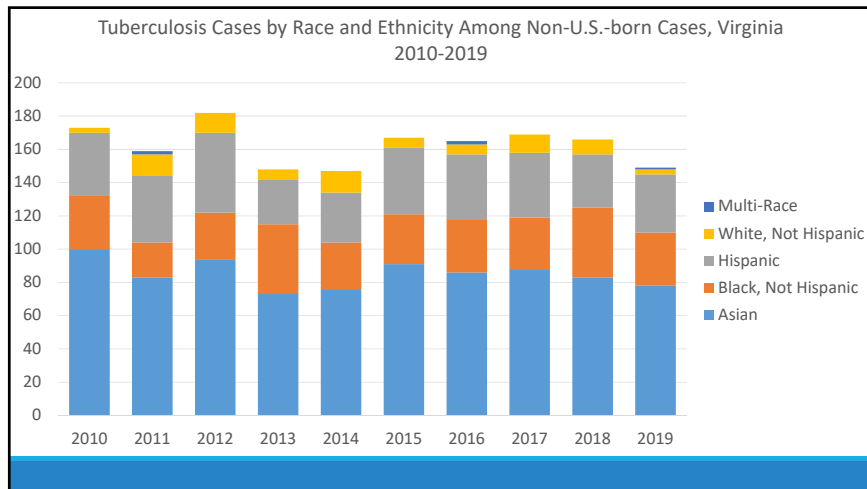
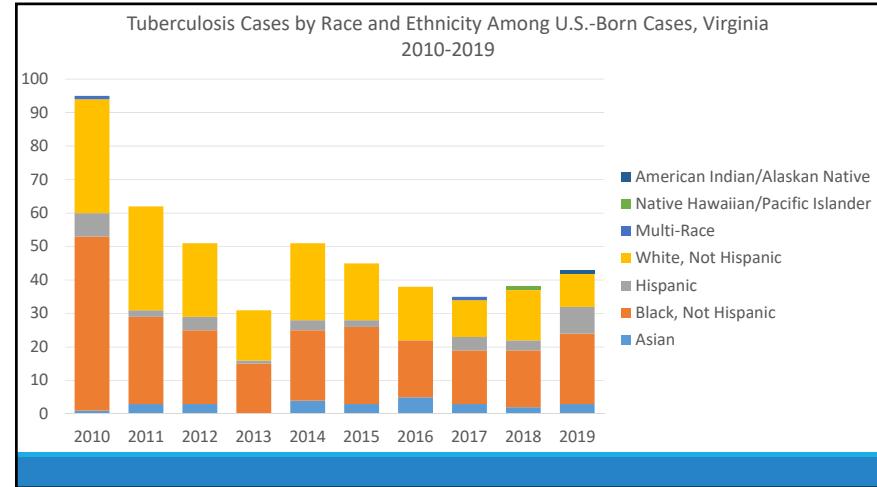
Window treatment can prevent early infection and progression to disease.

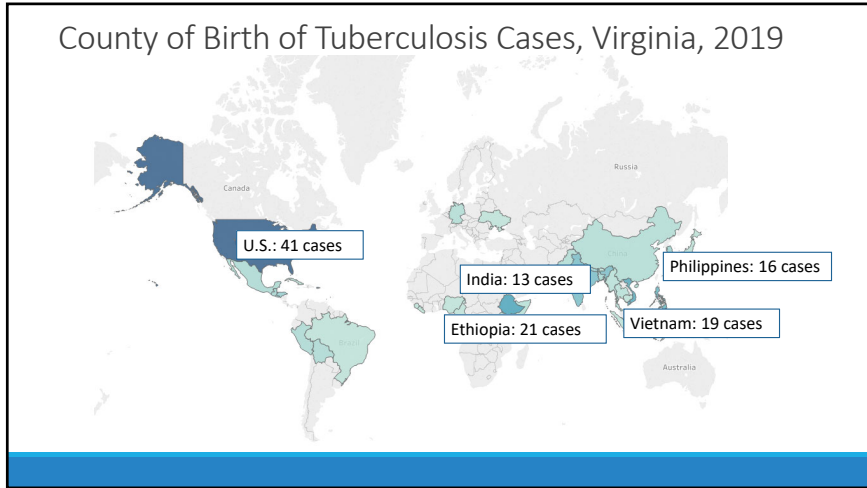
Symptoms of TB disease in children may include:

- Cough
- Fatigue or lack of energy
- Loss of appetite or weight gain
- Low energy
- Weight loss
- Swollen lymph nodes
- Fevers
- Night sweats
- Loss of interest in school
- Unexplained weight loss
- Unexplained fever
- Unexplained cough
- Unexplained chest pain
- Unexplained difficulty breathing
- Unexplained blood in sputum
- Unexplained swollen lymph nodes
- Unexplained enlarged spleen
- Unexplained enlarged liver
- Unexplained enlarged kidneys
- Unexplained enlarged heart
- Unexplained enlarged thyroid gland
- Unexplained enlarged testicles
- Unexplained enlarged ovaries
- Unexplained enlarged uterus
- Unexplained enlarged prostate gland
- Unexplained enlarged bladder
- Unexplained enlarged rectum
- Unexplained enlarged sigmoid colon
- Unexplained enlarged cecum
- Unexplained enlarged appendix
- Unexplained enlarged gallbladder
- Unexplained enlarged pancreas
- Unexplained enlarged spleen
- Unexplained enlarged liver
- Unexplained enlarged kidneys
- Unexplained enlarged heart
- Unexplained enlarged thyroid gland
- Unexplained enlarged testicles
- Unexplained enlarged ovaries
- Unexplained enlarged uterus
- Unexplained enlarged prostate gland
- Unexplained enlarged bladder
- Unexplained enlarged rectum
- Unexplained enlarged sigmoid colon
- Unexplained enlarged cecum
- Unexplained enlarged appendix
- Unexplained enlarged gallbladder
- Unexplained enlarged pancreas

When to call your child's doctor:

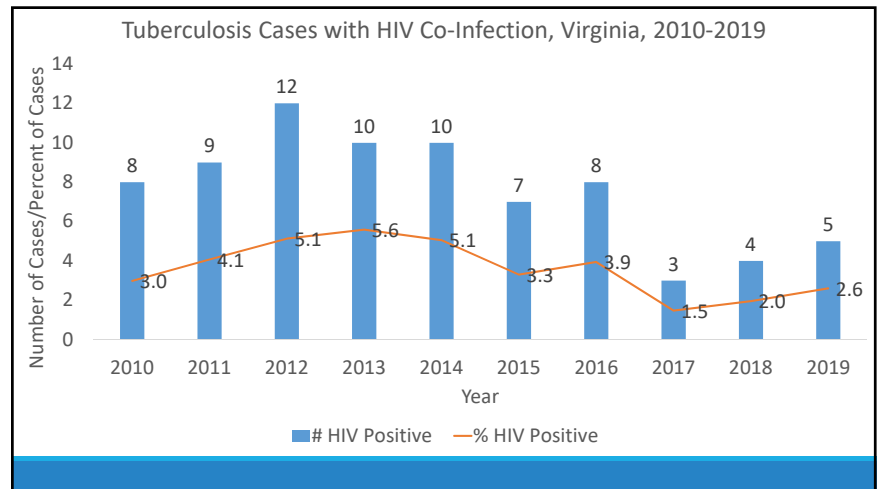
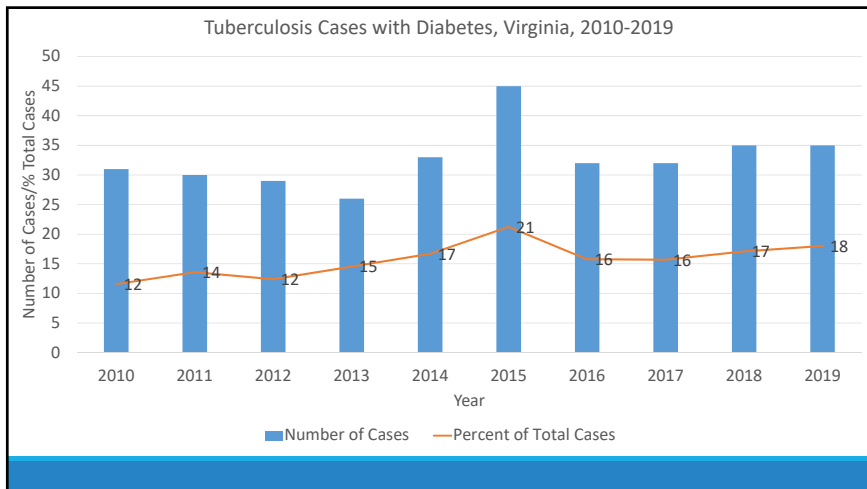
- When your child has any of the symptoms listed above.
- When your child has been in contact with someone who has TB disease.
- When your child has been in a high-risk setting (e.g., a day care center, school, or community center).
- When your child has been in a country where TB disease is common.
- When your child has been in a country where TB disease is common and you have not had a TB test.
- When your child has been in a country where TB disease is common and you have not had a TB test and you are planning to travel to the United States.

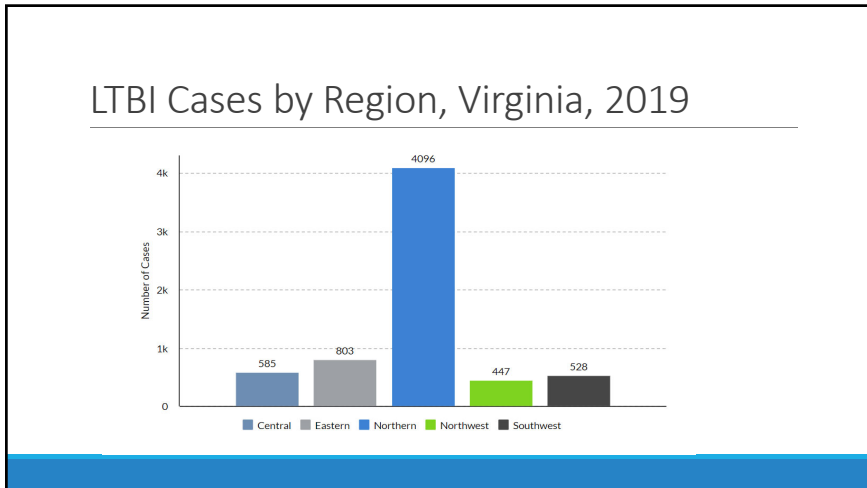
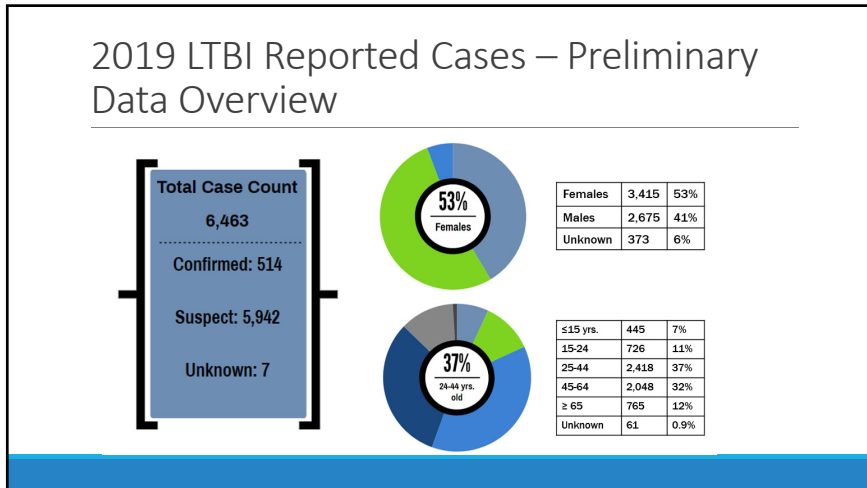
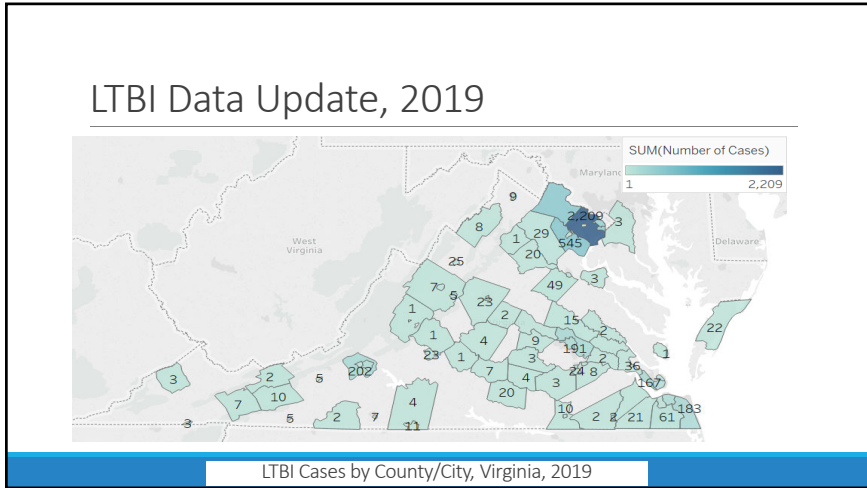
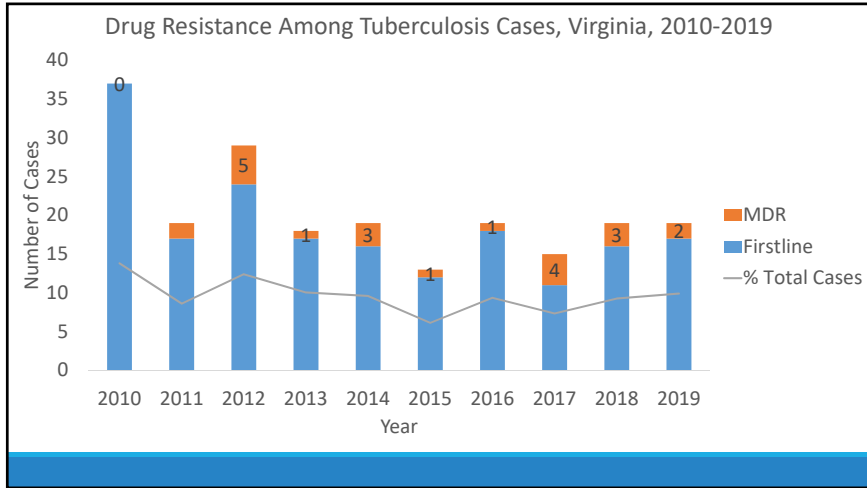




Top Five Countries of Birth Among Non-US—Born TB Cases, Virginia, 2015-2019

	2015	2016	2017	2018	2019
1	Philippines	India	Philippines	Ethiopia	Ethiopia
2	India	Philippines	India	Vietnam	Vietnam
3	Vietnam	Ethiopia	Ethiopia	India	Philippines
4	Ethiopia	Vietnam	Vietnam	Philippines	India
5	South Korea	Honduras	Guatemala	Honduras & South Korea	Honduras





Top Five Reporters for LTBI

- LabCorp (2,302)
- Quest Teterboro (1,049)
- Fairfax Public Health Lab (751)
- Quest Diagnostics –Atlanta (247)
- Quest Diagnostics – Chantilly (192)



LTBI Reporting for Local Health Departments

What to Report

- All presumptive/confirmed LTBI cases

When to Report/Forward a report to Central Office

- At LTBI diagnosis for patients identified through clinic
- Upon receipt of report from a community provider
- At completion of a contact investigation through the Final 502

How to Report

- Confidential Morbidity Report Portal; **OR**
- Fax received reports to VDH TB Program at 804-371-0248; **OR**
- Enter reports directly into VEDSS
- Submit Final 502 for LTBI identified during CI
- Via an alternate method, such as a line list, that captures clinic data

LTBI Reporting for Community Providers

What to Report

- All presumptive/confirmed LTBI cases

When to Report

- At LTBI diagnosis (positive test for infection, x-ray not consistent with TB)

How to Report

- Confidential Morbidity Report Portal; **OR**
- Fax received reports to LHD or to VDH TB Program at 804-371-0248; **OR**
- Via an alternate method, such as a line list, that captures clinic data

Electronic LTBI Reporting

The screenshot shows the VDH Virginia Department of Health website. The main heading is 'TUBERCULOSIS'. Below the heading, there are three prominent buttons: a blue button for 'Report Latent TB Infection (LTBI)', a red button for 'Local Health Districts - Report New Confirmed/Presumptive Active TB Cases', and an orange button for 'Local Health Districts - Report Initial 502 Information for New Contact Investigations'. To the left is a sidebar menu with categories like Tuberculosis, Data & Reports, Education, Forms for Local Health Departments, Special Populations, Screening & Testing, TB Disease, TB Infection (LTBI), and Training. Below the buttons, there is a paragraph about the mission of the Tuberculosis (TB) Control program and a 'Featured Story' section with 'Updates' and 'Archive' links.

Questions?

Contact Us:

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References

World TB Day — March 24, 2020. MMWR Morb Mortal Wkly Rep 2020;69:281.
<http://dx.doi.org/10.15585/mmwr.mm6911a1>

Global Tuberculosis Report, 2019. World Health Organization. Global tuberculosis report 2019. Geneva: World Health Organization; 2019. Licence: CC BY-NC-SA 3.0 IGO.

Amish Talwar, MD, MPH; Clarisse A. Tsang, MPH; Sandy F. Price; Robert H. Pratt; William L. Walker, DVM, PhD; Kristine M. Schmit, MD, MPH; Adam J. Langer, DVM, MPH. Tuberculosis — United States, 2019. Provisional Surveillance Data for World TB Day March 12, 2019.

VDH | VDH TB Website

Window Treatment After Exposure to Tuberculosis

What parents need to know

Children less than 5 years of age are at high risk of rapidly developing severe forms of TB disease after infection

Window treatment can prevent early infection and progression to disease

Symptoms of TB disease in children may include:

- Cough
- Feelings of sickness or weakness
- Lethargy
- Reduced playfulness
- Weight loss or lack of appropriate weight gain
- Fever
- Night sweats

What should happen before my child starts window treatment?
Before your child starts window treatment, they will have a symptom screening, physical exam, a chest x-ray, and a skin or blood test for TB infection.

Why are medications recommended if my child's TB test is negative?
It can take time for a TB test to become positive after a child has been exposed to TB. Medication, called window treatment, protects your child until it is known for sure if they have been infected. Young children are more likely to progress rapidly to severe forms of TB disease, so protecting them early is very important.

Why does my child need another TB test in 8-10 weeks?
In 8-10 weeks, your child's body will have had time to respond if they have been infected with TB. The second test will tell us if they need to continue with treatment or if they are not infected and can stop taking medication.

Why does my older child not need window treatment?
Older children are less likely to rapidly progress to severe TB disease than young children and infants.

How can I help my child take isoniazid?

- Pills can be crushed and dissolved
- Giving pills at bedtime helps avoid any stomach discomfort
- Mix the crushed pills with a small amount of food your child likes such as:
 - Mashed Bananas
 - Apple Sauce
 - Pudding
 - Yogurt

Potential mild side effects:

- Child develops a rash or becomes itchy
- Stinging or burning in the nose or throat
- Child develops a sore throat
- Stomach pain or upset
- Change in taste
- Change in color of urine
- Change in color of stool

When to call your child's doctor:

- If your child has a rash, fever, or swelling in any part of the face or the lips, only swelling
- If your child has chest pain or coughs more than 24 hours
- If you notice a yellowing of your child's skin or whites of the eye
- If your child has trouble breathing or sleep apnea
- If your child has trouble drinking or eating