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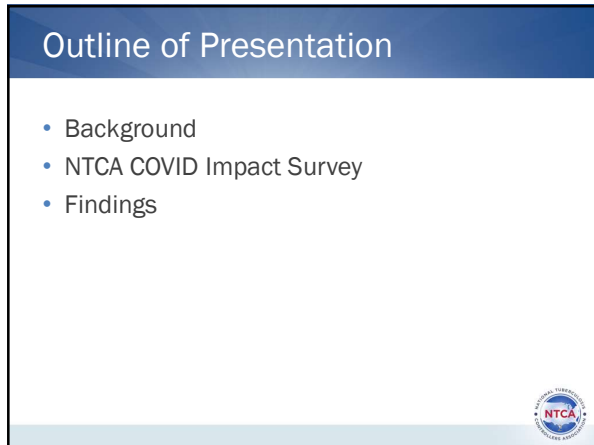
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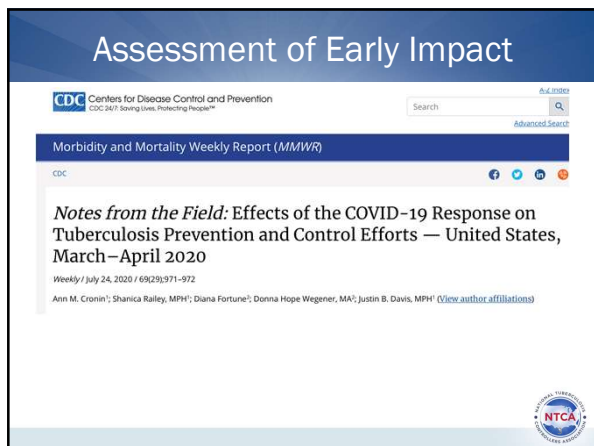
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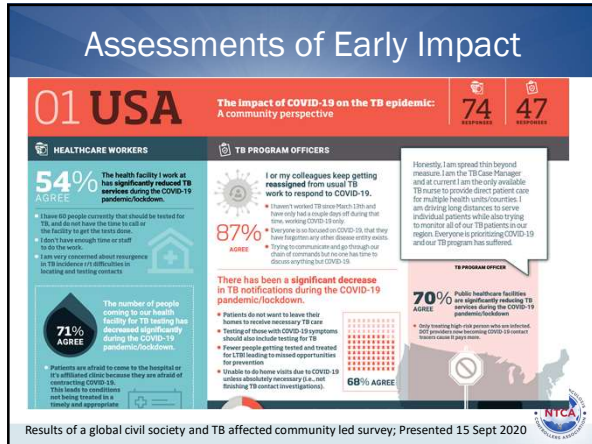
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**Purpose of NTC's Survey Effort**

Three primary goals for the survey:

- Assess impact of COVID-19 on TB Programs, including early evidence of TB-COVID co-infections
- Identify strategies for addressing COVID-19 impact on TB Programs
- Evaluate potential need for additional resources to TB Programs due to COVID-19



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**Survey Distribution**

**Timing was critical**

- Launched January 2021; Closed March 2021
- Initial distribution:
  - Sent to all NTC members representing Cooperative Agreement programs and Local Health Departments (LHD) programs
  - Requested that members forward on the survey to other local health departments that aren't members
  - Individualized outreach to members who didn't respond
- Secondary distribution:
  - National Association of County and City Health Officials (NACCHO) included the survey link in their HIV, STI, and Viral Hepatitis monthly digest
- Survey instructions requested that one survey be completed per jurisdiction



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## Survey Respondents

- 96 Local Programs (County, City, Regional)
- 46 State/Territory/District Programs



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## Changes in TB activities due to COVID-19

		Reduced	No Change	Increased	n
Staffing and service changes	TB program staff time devoted to TB activities	120	16	1	137
	TB clinic hours	76	31	4	111
	TB clinic appointments	92	22	2	116
	Proportion of B notifications known to have arrived being evaluated	64	37	0	101
Service delivery changes	Proportion of close contacts being evaluated	42	70	3	115
	LTBI treatment initiation	84	43	4	131
	Treatment via in-person DOT for patients with presumptive or confirmed TB	78	38	4	120
Diagnosis and reporting change	The use of telemedicine for clinic visits	3	22	65	90
	The use of electronic DOT (eDOT)	6	26	80	112
	Reporting of presumptive TB from providers	61	50	2	113
	Collection or receipt of sputum specimens to the public health laboratory for MTB testing	45	56	0	101



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STAFFING AND SERVICES CHANGES

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### Timing of Impact

- Assessed at time of survey completion (early 2021)
- Pandemic had a sustained high impact throughout 2020
- A lot of uncertainty around when staffing would return to normal
- Many services had not resumed normal operations particularly at the local level

Month/Category	Count
January	10
February	10
March	80
April	95
May	100
June	90
July	80
August	75
September	75
October	75
November	75
December	75
Ongoing	80
Not Affected	5

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### Agency policies to protect staff

*Illustrative Quotes:*

- "COVID made priority by county administrators, no staff available for TB and they aren't allowed to work overtime."- State
- "Our office closed and still remains closed due to COVID. We all continue to telework for my department. I have been unable to see any of my LTBI clients in person. I do see my active cases for refills at their home for a quick switch, but my time is limited to less than 15 minutes. I am heavily relying on their monthly check ins with the Infectious Disease physician."- LHD
- "TB Clinics in most local health depts. were shut down for a period of months; PH Nursing staff totally taken off TB -- and continue to be deployed exclusively to COVID response" - State

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### Program challenges due to COVID-19

*Illustrative Quotes:*

- "Large proportions of our staff are actively involved in the COVID-19 response, reducing time available for TB programmatic work. Potentially delayed diagnoses may mean that we see more and sicker TB patients in the coming years." - LHD
- "State is very diverse in program/population size and impacts on TB programs have not been distributed equally among jurisdictions." - State
- "Work toward TB elimination is not happening at this time. As a result of the reduction in capacity at the local level, we are not going to see progress toward TB elimination goals. All focus has been on the identification and treatment of active TB disease and not TB infection. The biggest challenge faced by our programs at the local and state level is available time and available staff to do program work." - State
- "We are pushed to do more and not hiring. We are told there's no money. I have gained 3 months comp time. Working 10- to 13-hour days, on call, holidays and weekend related to COVID. Need help...more funds for more positions." - LHD

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## SERVICE DELIVERY CHANGES



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## Adaptations Made by TB Programs

How has your program adapted to the pandemic to be able to continue to deliver services		
	n	%
Working remotely when possible*	101	71.1
Changing inclusion criteria for eDOT*	53	37.3
Issuing interim TB Program operation guidance*	36	25.4
Modification in standards of care	27	19.0
Increasing the amount of medication that could be issued to a patient at any given time	34	23.9
Starting use of telemedicine	37	26.1
Changing prioritization of cases/case management	26	18.3
Changing approach to conducting contact investigations	26	18.3
Other	22	15.5
No adaptation*	16	11.3

\*Other\* responses included: Stopped/decreased targeted LTBI screening and treatment initiation, changed priority of B waivers, partnered more closely with PCPs, increased home visits, increased PPE use, had medications delivered by mail, conducted over the phone histories/teaching/contact investigation assessment

\*Significant difference (<.05) between state and local responses



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## Telemedicine

Are there successes to using telemedicine for case management?		
	n	%
Yes	51	75
No	3	4.4
Unknown	14	20.6

- Patient centered
  - Convenient (don't need to leave work or find childcare/transportation, flexible timing, removes travel time)
  - Increases compliance/adherence (i.e., reduces no-shows related to travel limitations and/or fear of coming in-person)
  - Not infringing on patient's private space
  - More control for the patient
  - Increases patient satisfaction
- Increases flexibility and time saving for case manager/providers
- Reduces risk of infectious disease exposure to client and staff

Are there limitations to using telemedicine for case management?		
	n	%
Yes	38	55.9
No	22	32.4
Unknown	8	11.8

- Technology access (equipment, connectivity) and capacity (new technology) for patient
- Ability to draw labs, do vital signs, and physically examine the patient
- Not same level of interaction with the patient/hard to build rapport
- Hard to use interpreter



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### eDOT

- **Allowed eDOT earlier in treatment**
  - Allowed for initiation when treatment started or after a decreased number of in-person doses (with a few weeks)
  - Dropped requirement for intensive phase to be completed
  - Dropped requirement for being out of isolation
  - Dropped number of mandatory in-person doses
- **Allowed for more patients to be eligible**
  - Included patients who didn't speak English
  - Included patients with drug resistant TB if approved by the clinician
  - Included children with guardian present
  - Included smear positive cases
  - Very few exclusion criteria – unable to use technology or persistent nonadherence (on legal order)



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### DIAGNOSIS AND REPORTING CHANGES



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### Changes Reported by TB Programs

Have there been delays for clients in accessing TB screening, testing, and/or treatment through their primary care providers?

	n	%
Yes	35	24.6
No	37	26.1
Unknown	70	49.3


Are you seeing any unique clinical, demographics, or outcome characteristics among cases seen this year?

	n	%
Yes	32	22.5
No	83	58.5
Unknown	27	19.0

Are you aware of testing delays for any of the following groups?

	n	%
Healthcare	27	19.0
School	15	10.6
Daycare	7	4.9
Correctional Facilities	10	7.0
Other	19	13.4
None	88	62.0

- **More advanced disease**
- **Increase in TB related deaths**



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### Decreased Number of Reported TB Cases - 2020

*Illustrative Quotes:*

- “Delayed hospitalization; fear of COVID, fear of medical profession; political unrest and distrust of science/medical/PH professions; fear of losing employment in midst of pandemic; fear of deportation in midst of political and pandemic turmoil” - State
- “Delayed seeking care by patients due to concerns of COVID; Misdiagnosis because clinicians think a patient had COVID; Delayed reporting” - LHD
- “The pandemic has definitely had an impact: people are not seeking medical care, TB is the diagnosis of last resort, health departments have curtailed activities to focus on COVID” - LHD




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### Summary

- Need increased qualified staff and/or time dedicated to TB
  - Flexible and Sustained funding to expand TB program staff
- Sustainment/expansion/reimbursement of eDOT and telemedicine
- Messaging to “Think TB”

TB Program Staff uniquely qualified to respond to COVID-19 and future pandemics

**Important time to invest in TB to both respond to the depletion of resources/staffing that has already occurred and build out a solid infrastructure/knowledge base for what might come.**




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### Limitations

- Point in time survey (pre-COVID-19 vaccine)
- Not representative of all jurisdictions experience
- Results not broken out by burden of TB and COVID-19
- Interpretation of questions might vary




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### Acknowledgements

- Shu Wang, MD, MPH&TM, PharmD
  - Ohio TB Program Medical Consultant
- Evan Timme, MPH
  - AZ TB Surveillance Epidemiologist
- Donna Hope Wegener, MA
- NTCA Survey Committee members
- NACCHO Infectious Disease and Immunization Team
- All respondents from state and local TB programs



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### Questions?



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