# Tuberculosis in Franklin County, 2017

Franklin County TB Partnership Meeting May 8, 2018

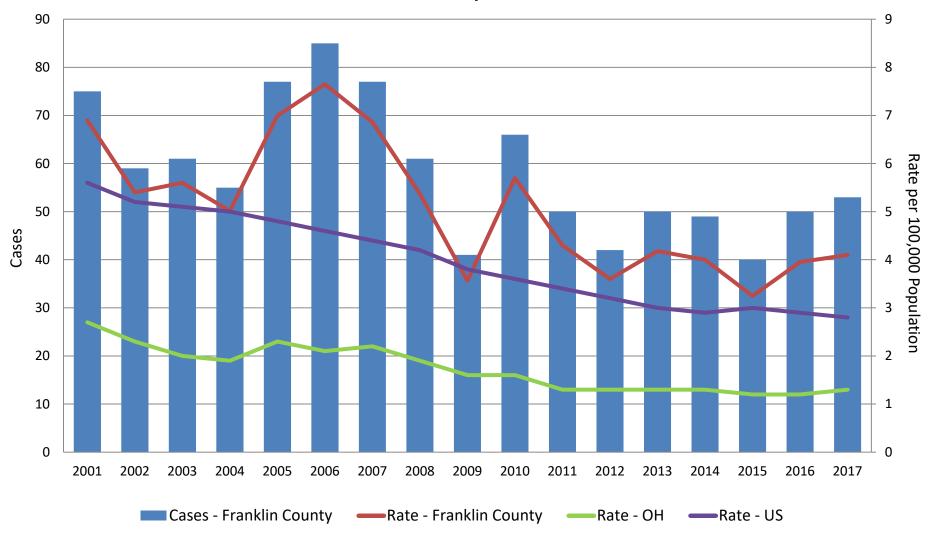


## 2017 Active TB Cases

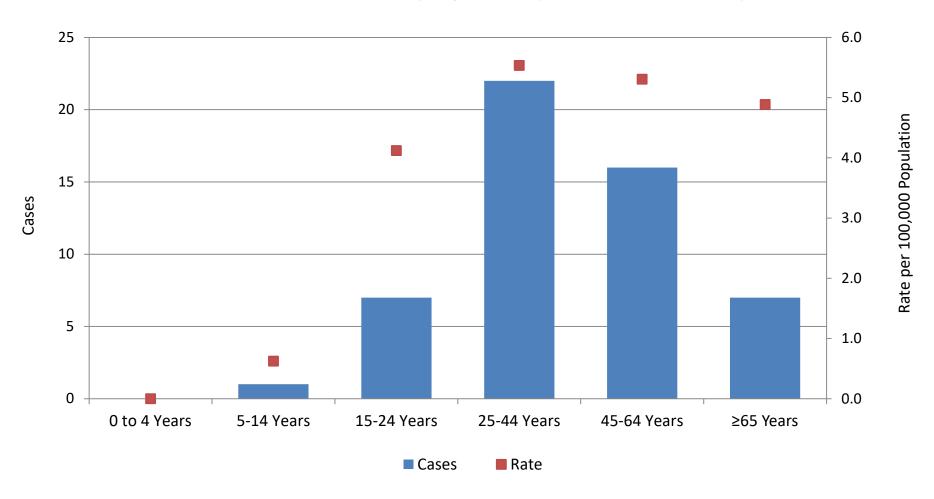
Data as of 4/29/18



## Tuberculosis Incidence – Franklin County, Ohio, and the United States, 2001-2017



#### Active TB Cases and Rates by Age Group – Franklin County, 2017



Range	Mean	Median
12 years – 86 years	42 years	38 years

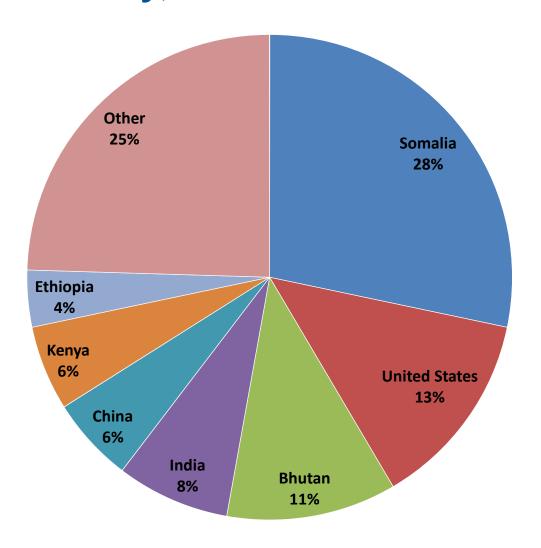
# Demographics of Active TB Cases – Franklin County, 2017

		Cases, (%) N=53	Rate (per 100,000 pop.)
Sex	Female	23 (43%)	3.6
	Male	30 (57%)	4.9
Race	Asian	17 (32%)	26.5
	Black or African-American	28 (58%)	9.7
	White	8 (15%)	0.9
Ethnicity	Hispanic	2 (4%)	3.0
	Non-Hispanic	51 (96%)	4.3
Birth	US-Born*	7 (13%)	0.6
	Foreign-Born	46 (87%)	35.6

<sup>\*</sup>Born in the US or born outside the US to at least one parent who was a US citizen.

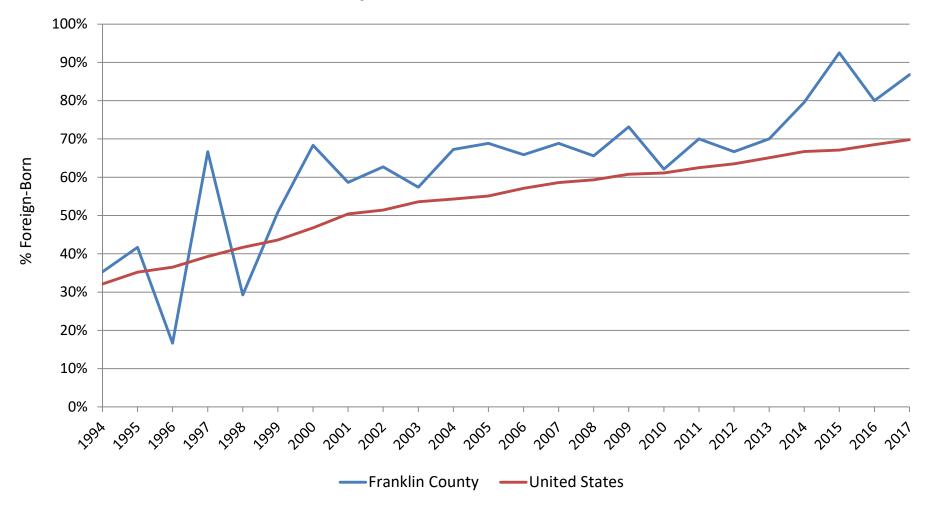
Caution should be used when interpreting and comparing rates in small populations (e.g., county-level rates stratified by age, race, etc.). In such populations, a small change in the number of cases can cause a dramatic change in the rate.

# Country of Birth of Active TB Cases – Franklin County, 2017



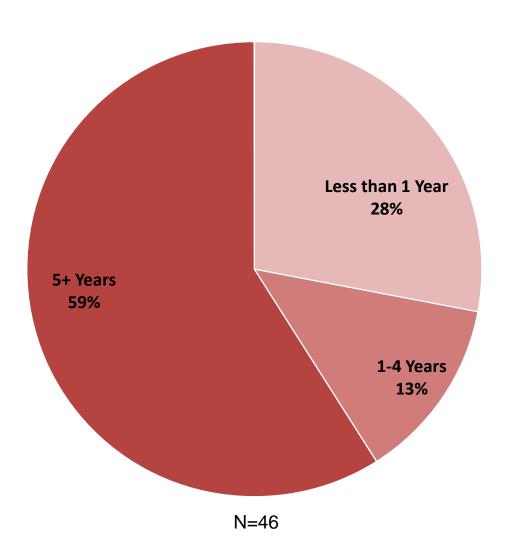
N=53; "Other" includes 1 case each from 13 different countries

### Percentage of Active TB Cases Who Were Foreign-Born\* - Franklin County and the United States, 1994 - 2017



<sup>\*</sup>Excluding individuals born abroad to US citizens

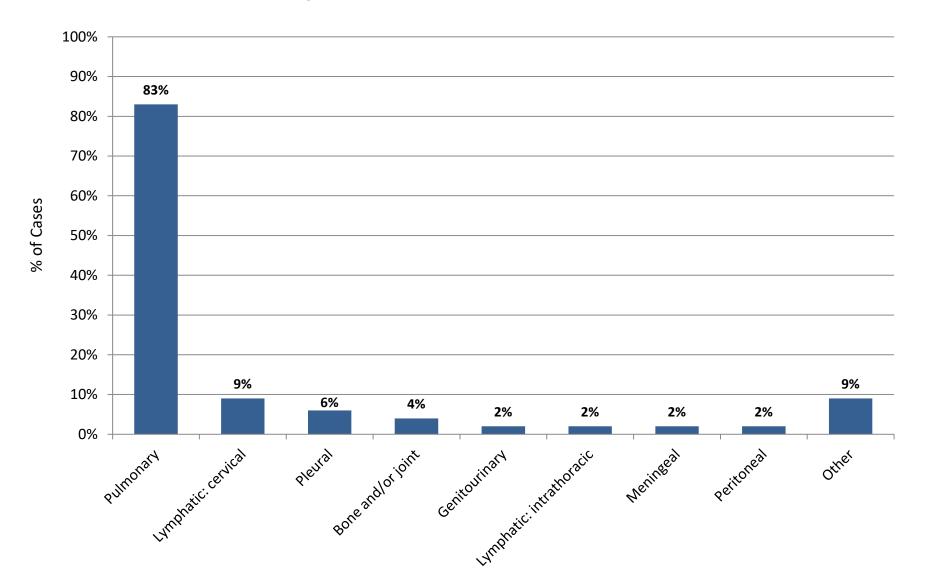
## Foreign-Born Active TB Cases: Duration of Residence in United States, – Franklin Co., 2017



Clinical Characteristics of Franklin County Active TB Cases, 2017  Cases (%) N=53		
Previous TB	Yes	3 (6%)
diagnosis	No	50 (94%)
Primary reason	TB symptoms	34 (64%)
evaluated for TB	Abnormal chest X-ray	12 (23%)
	Immigration medical exam	3 (6%)
	Targeted testing	2 (4%)
	Healthcare worker	1 (2%)
	Incidental lab result	1 (2%)
Case verification	Positive culture	33 (62%)
	Clinical case definition	14 (26%)
	Provider diagnosis	6 (11%)
Site of disease	Pulmonary	35 (66%)
	Extrapulmonary	9 (17%)
	Both	9 (17%)
Drug resistance*	Isoniazid	3 (9%)
	Streptomycin	3 (9%)
	Para-amino salicylic acid (PAS)	1 (3%)
	Pyrazinamide	1 (3%)
	Rifampin	1 (3%)

<sup>\*</sup>Among culture-positive cases (n=33); 2 cases were resistant to >1 drug

# Site of Disease among Active TB Cases – Franklin County, 2017



# Risk Factors among Active TB Cases – Franklin County, 2017

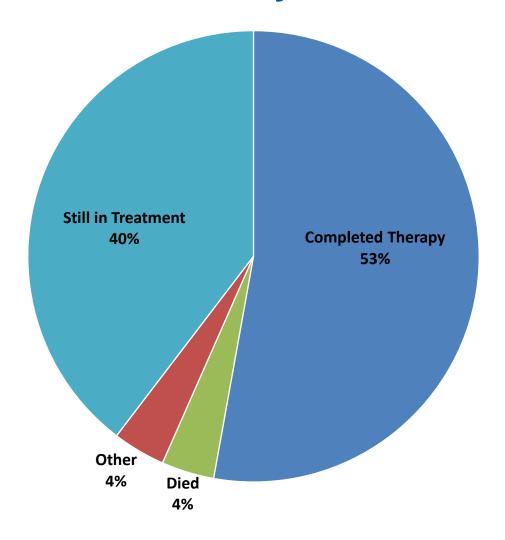
Risk Factors		Cases (%) N=53
HIV	Positive	1 (2%)
	Negative	52 (98%)
Homeless within the year prior	Yes	1 (2%)
to diagnosis*	No	51 (98%)
Residing in a correctional	Yes	0
facility at time of diagnosis*	No	52 (100%)
Residing in a long-term care facility at time of diagnosis*	Yes	0
	No	52 (100%)

<sup>\*</sup>Patients ≥15 years old (n=52)

Risk Factors, cont.		Cases (%) N=53
Excess alcohol use <sup>†</sup>	Yes	3 (6%)
	No	49 (95%)
Injection drug use <sup>†</sup>	Yes	1 (2%)
	No	51 (98%)
Non-injection drug	Yes	2 (4%)
use <sup>†</sup>	No	50 (96%)
Other Risk Factors	Diabetes	5 (9%)
	Contact of infectious TB patient within past 2 years	3 (6%)
	Immunosuppression (not HIV)	2 (4%)
	Incomplete LTBI therapy	2 (4%)

†Within the year prior to diagnosis; patients ≥15 years old (n=52)

# Treatment Completion Status of Active TB Cases – Franklin County, 2017



N=53; "Other" = moved to another jurisdiction during treatment

# Comparison to CDC 2020 Objectives



**PUBLIC HEALTH** 

### **Goals for Reducing TB Incidence**

National Goal	2020 Target	2017 Franklin County
TB Incidence Rate: Overall Reduce the incidence of TB disease	1.4	4.1
TB Incidence Rate: US-Born Persons  Decrease the incidence of TB disease among US-born persons	0.4	0.6
TB Incidence Rate: Foreign-Born Persons  Decrease the incidence of TB disease among foreign-born persons	11.1	35.6
TB Incidence Rate: US-Born Non-Hispanic Blacks Decrease the incidence of TB disease among US-born non-Hispanic Blacks or African Americans	1.5	1.2*
TB Incidence Rate: Children Under 5  Decrease the incidence of TB disease among children <5 years of age	0.3	0.0

<sup>\*</sup>Population data are not available for US-born non-Hispanic Blacks or African Americans; rate was calculated using US-born Black or African American population (any ethnicity) and may be an underestimate.

Caution should be used when interpreting and comparing rates in small populations (e.g., county-level rates stratified by age, race, etc.). In such populations, a small change in the number of cases can cause a dramatic change in the rate.

#### **Questions?**

