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# Tuberculosis in Clark County

Clark County Combined Health District  
(CCCHD)



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# What is Tuberculosis?

Tuberculosis (TB) is caused by a bacterium called *Mycobacterium tuberculosis*. The bacteria usually attack the lungs, but TB bacteria can attack any part of the body such as the kidney, spine, and brain. TB is spread by respiratory contact with an actively infected individual. Not everyone infected with TB bacteria becomes sick. As a result, two TB-related conditions exist: latent TB infection (LTBI) and TB disease (also known as active TB). If not treated properly, TB disease can be fatal.

## TB Disease/Active TB

TB bacteria become active if the immune system can't stop them from growing. When TB bacteria are active (multiplying in your body), this is called TB disease. People with TB disease are sick. They may also be able to spread the bacteria to people they spend time with every day.

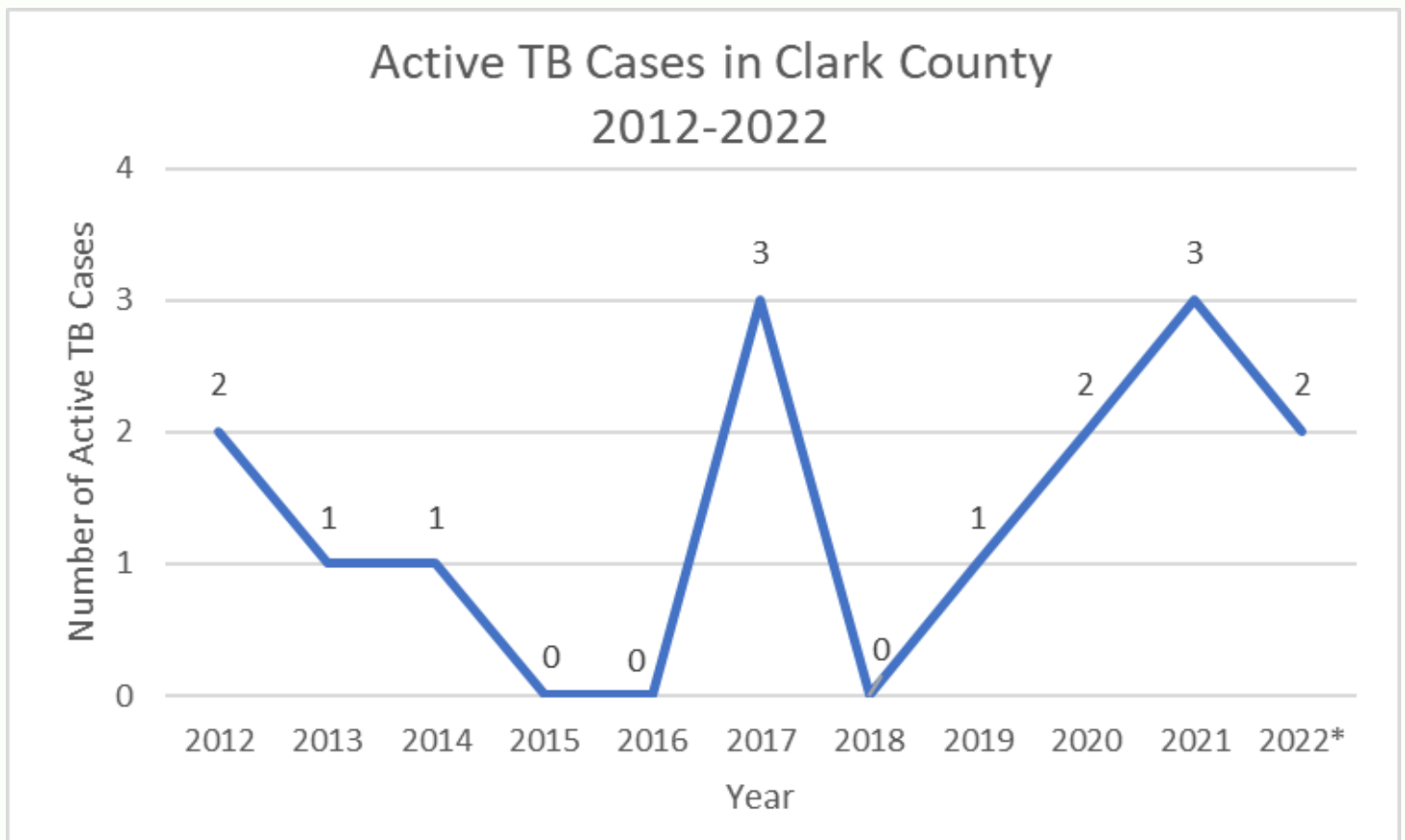
Many people who have latent TB infection never develop TB disease. Some people develop TB disease soon after becoming infected (within weeks) before their immune system can fight the TB bacteria. Other people may get sick years later when their immune system becomes weak for another reason.

For people whose immune systems are weak, especially those with HIV infection, the risk of developing TB disease is much higher than for people with normal immune systems.

**TB occurs throughout the world, but is much more common in some countries. Most TB occurs in sub-Saharan Africa, Eastern Europe and Asia.**

## TB Disease/Active TB in Clark County

From 2012 to 2022\* there have been a total of 15 cases of active TB within Clark County (Figure 1).

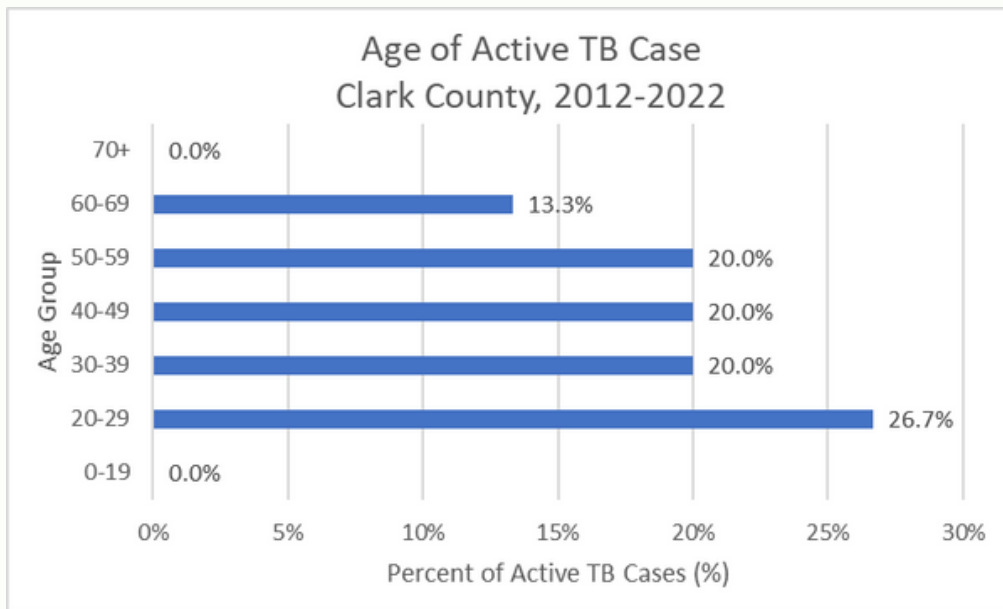


**Figure 1:** Active TB Cases in Clark County by Year, 2012-2022\*.

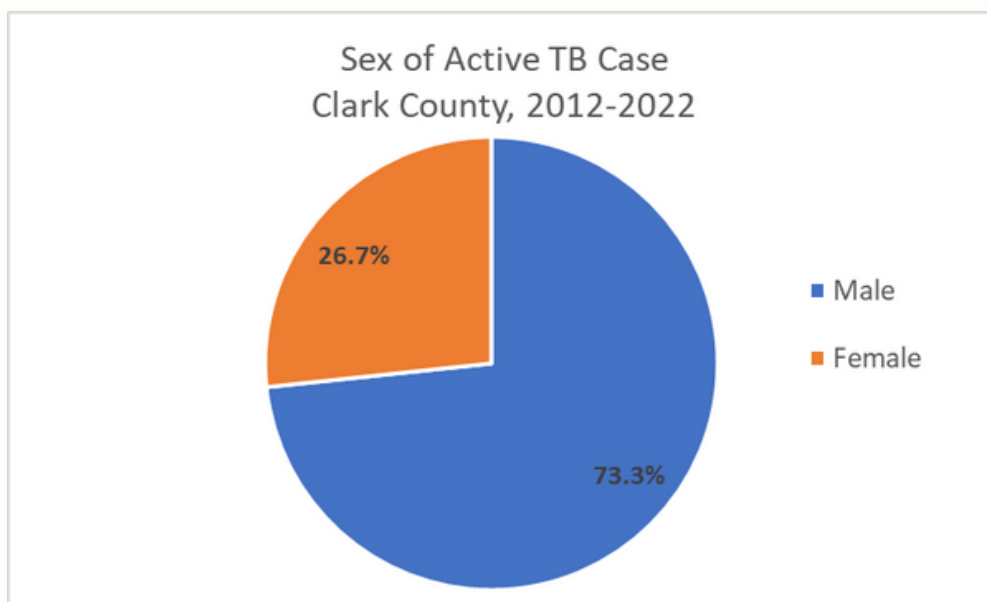
\*2022 numbers are preliminary and subject to change.

## Demographics

26.7% of the active TB cases in Clark County from 2012 until 2022\* have fallen within the 20-29 years age group (Figure 2). Almost  $\frac{3}{4}$  (73.3%) of the active TB cases have identified as male (Figure 3).

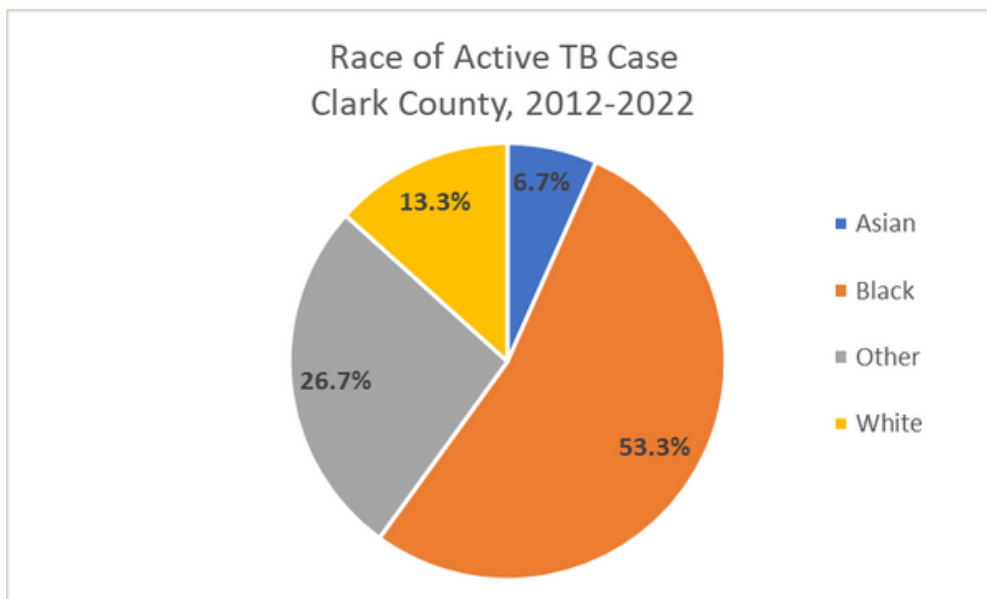


**Figure 2:** Active TB Cases in Clark County by Age Group, 2012-2022\*. \*2022 numbers are preliminary and subject to change.

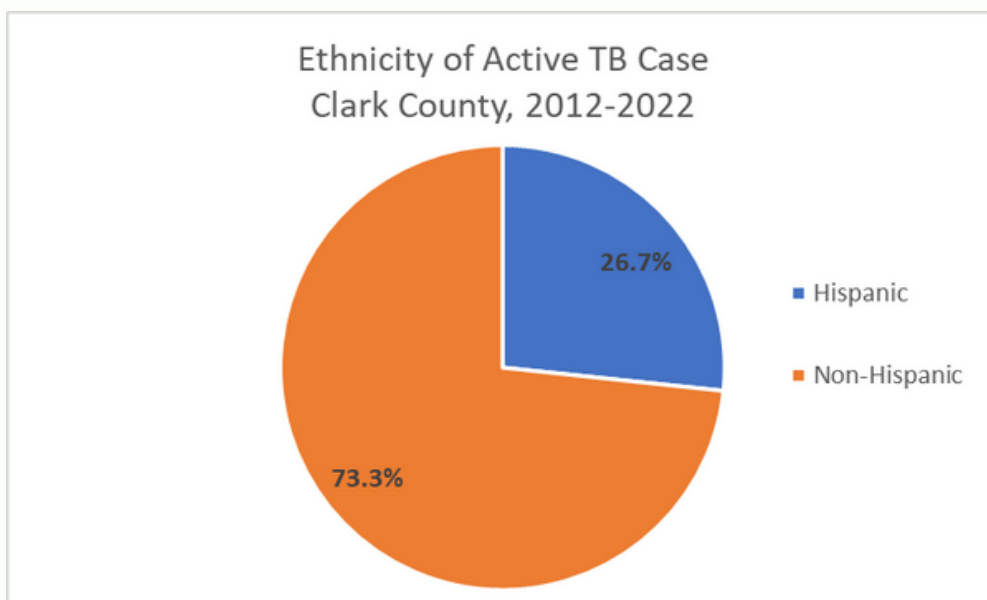


**Figure 3:** Active TB Cases in Clark County by Sex, 2012-2022\*. \*2022 numbers are preliminary and subject to change.

Over half (53.3%) of the active TB cases from 2012 through 2022\* identified as Black, the second highest race was the other race at 26.7% (Figure 4). 26.7% of the active TB cases identified as Hispanic (Figure 5).

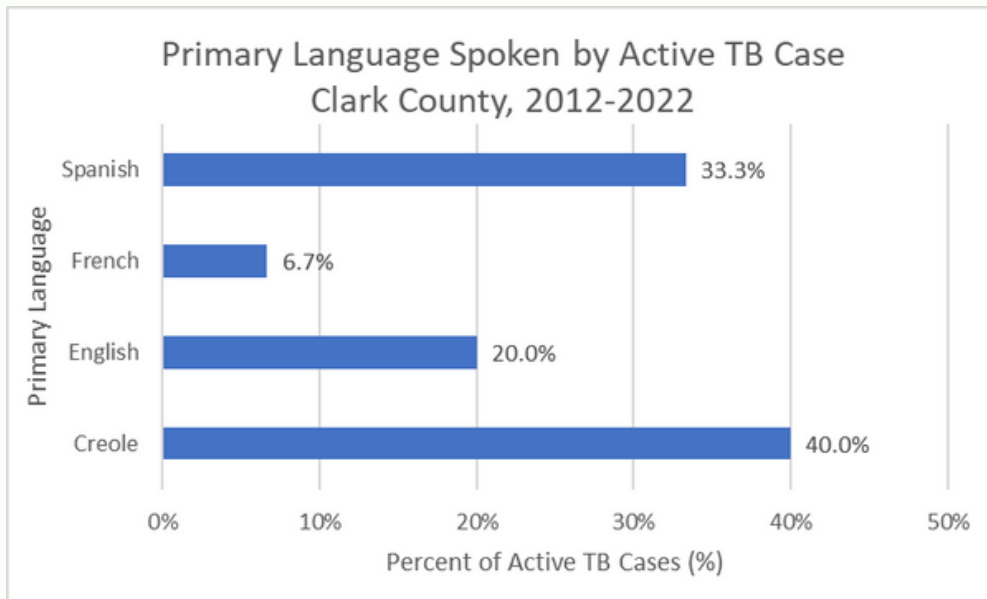


**Figure 4:** Active TB Cases in Clark County by Race, 2012-2022\*. \*2022 numbers are preliminary and subject to change.



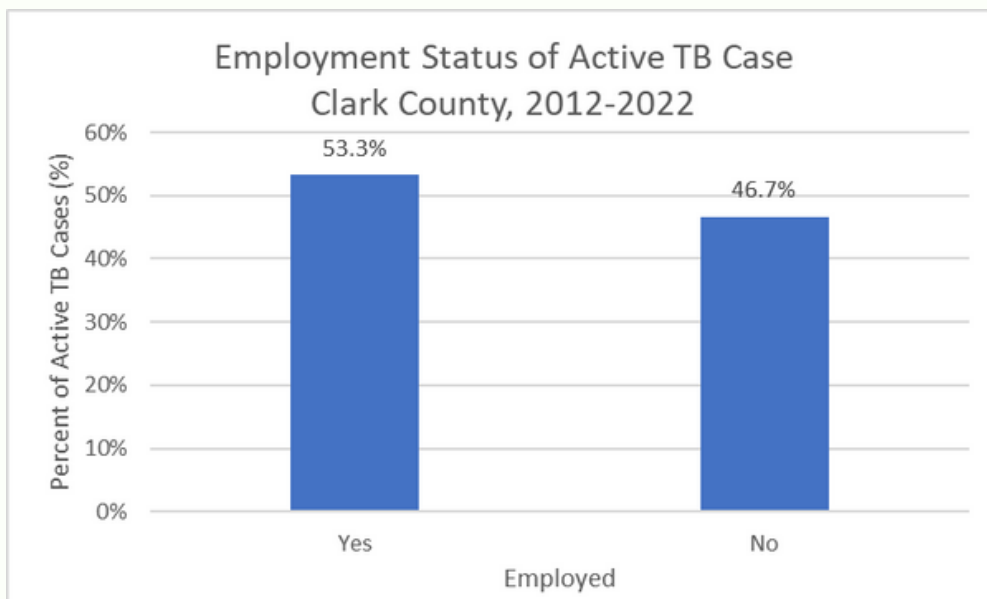
**Figure 5:** Active TB Cases in Clark County by Ethnicity, 2012-2022\*. \*2022 numbers are preliminary and subject to change.

Of the 15 active TB cases in Clark County from 2012 to 2022\*, the majority (40.0%) of cases spoke Creole (also known as Haitian Creole or French Creole) as their primary language. The second highest language spoke primarily language (33.3%) was Spanish (Figure 6). Of the active TB cases in Clark County, only 13.3% were born in the United States.



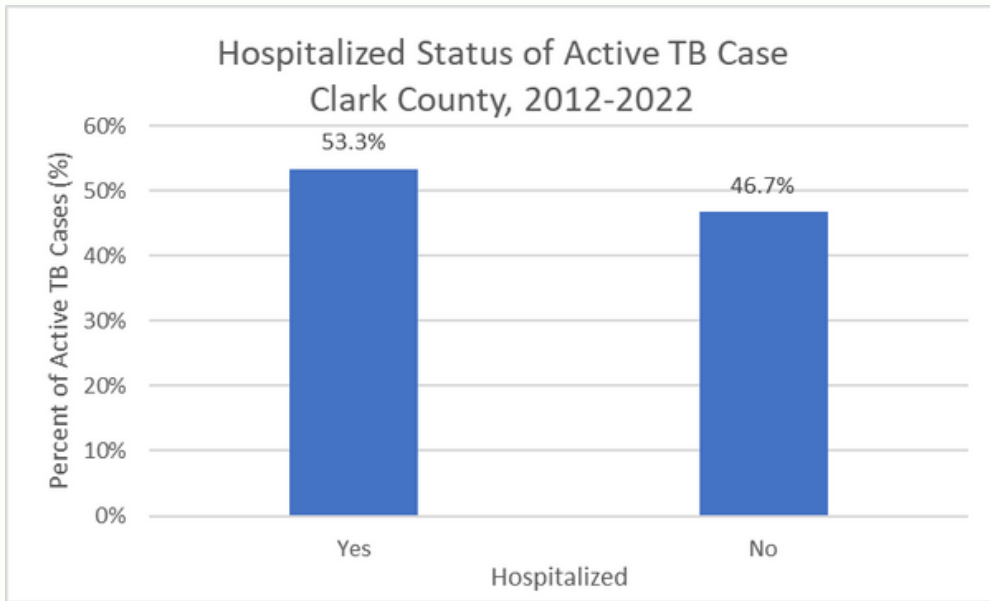
**Figure 6:** Active TB Cases in Clark County by Primary Language Spoke, 2012-2022\*. \*2022 numbers are preliminary and subject to change.

The majority (53.3%) of active TB cases in Clark County were employed at the time of their diagnosis (Figure 7).



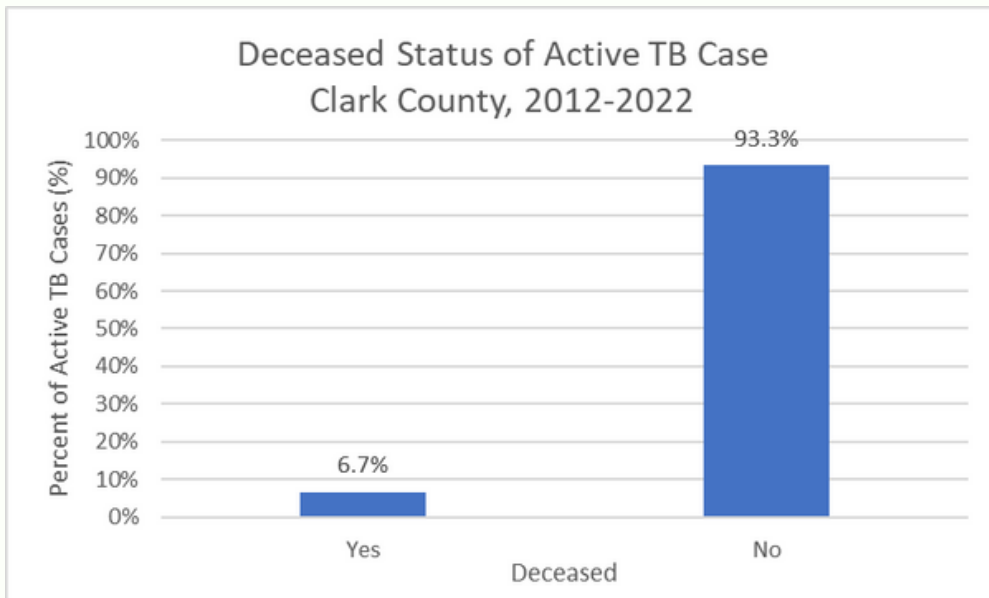
**Figure 7:** Active TB Cases in Clark County by Employment Status, 2012-2022\*. \*2022 numbers are preliminary and subject to change.

The majority (53.3%) of active TB cases in Clark County were hospitalized at the time of their diagnosis of due to their diagnosis (Figure 8).



**Figure 8:** Active TB Cases in Clark County by Hospitalized Status, 2012-2022\*. \*2022 numbers are preliminary and subject to change.

6.7% of the active TB cases in Clark County have passed away due to their TB diagnosis (Figure 9).

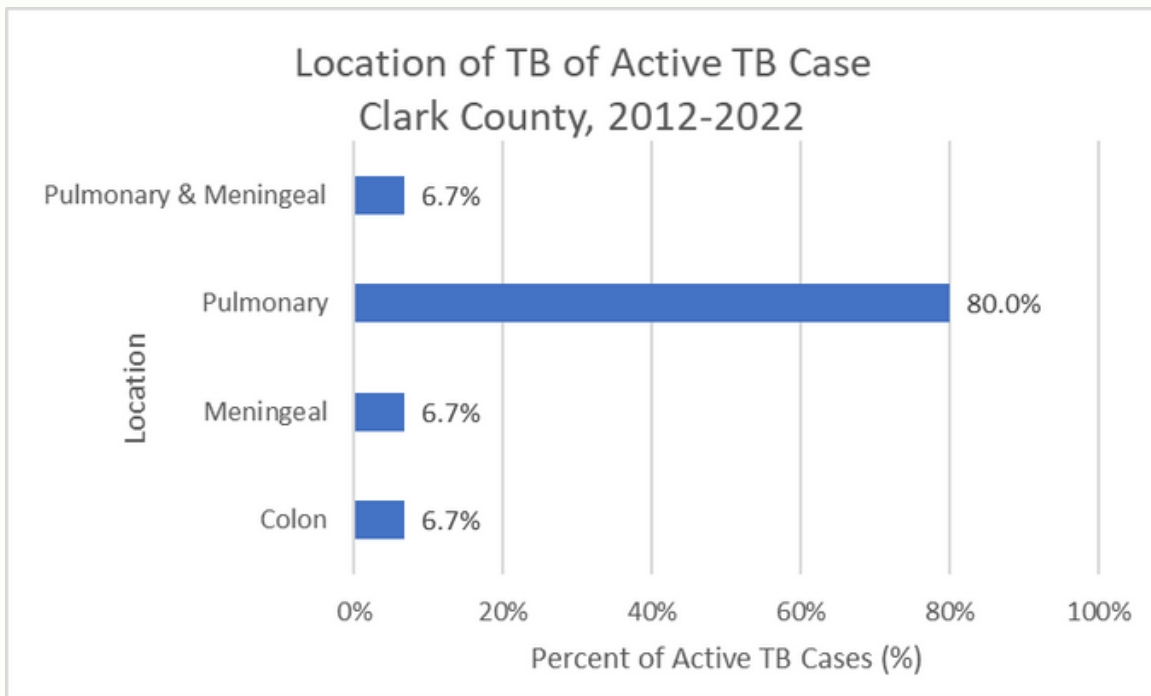


**Figure 9:** Active TB Cases in Clark County by Deceased Status, 2012-2022\*. \*2022 numbers are preliminary and subject to change.



## Location of TB Bacteria

The primary location the TB bacteria usually attacks is the lungs (pulmonary), but TB bacteria can attack any part of the body such as the kidney, colon, and spine/brain (meningeal). The active TB cases in Clark County primarily involved the lungs (pulmonary) (80.0%) and 6.7% of the cases involved multiple locations (pulmonary and meningeal) (Figure 10).



**Figure 10:** Active TB Cases in Clark County by Location of TB, 2012-2022\*.

\*2022 numbers are preliminary and subject to change.

## Other Contributing Factors/ Risk Factors

Generally, persons at high risk for developing TB disease fall into two categories:

- Persons who have been recently infected with TB bacteria
- Persons with medical conditions that weaken the immune system

### **Persons who have been recently infected with TB bacteria**

This category includes:

- Close contacts of a person with an infectious TB disease
- Persons who have immigrated from areas of the world with high rates of TB
- Children less than 5 years of age who have a positive TB test
- Groups with high rates of TB transmission, such as homeless persons, injection drug users, and persons with HIV infection
- Persons who work or reside with people who are at high risk for TB in facilities or institutions such as hospitals, homeless shelters, correctional facilities, nursing homes, and residential homes for those with HIV

### **Persons with medical conditions that weaken the immune system**

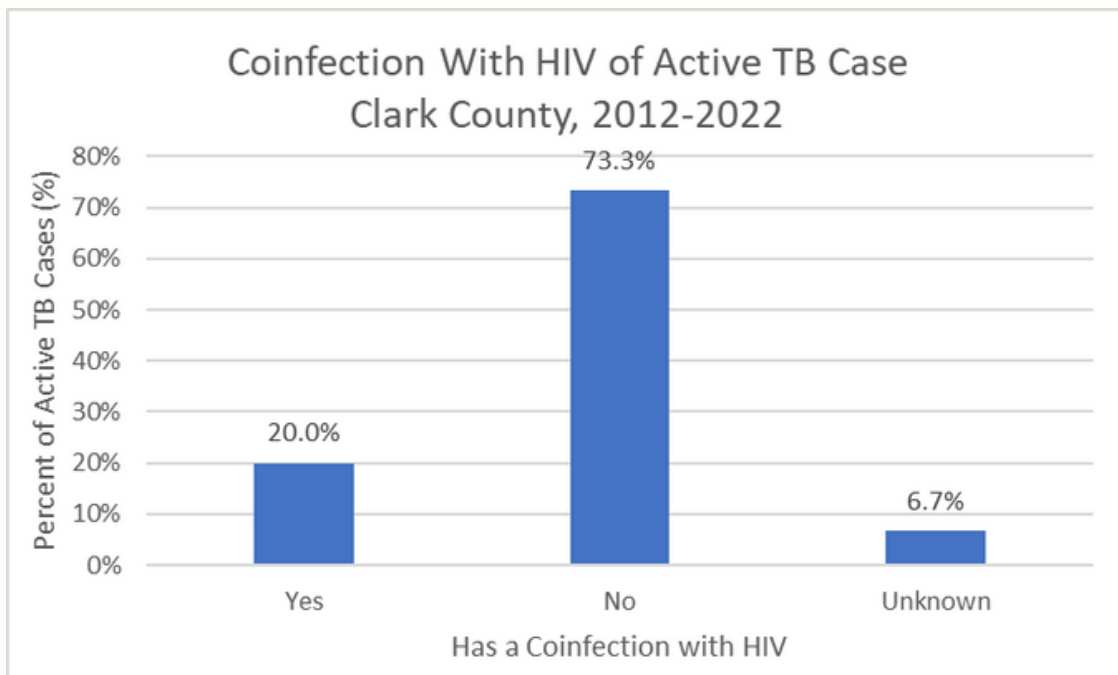
Babies and young children often have weak immune systems. Other people can have weak immune systems, too, especially people with any of these conditions:

- HIV infection (the virus that causes AIDS)
- Substance abuse
- Silicosis
- Diabetes mellitus
- Severe kidney disease
- Low body weight
- Organ transplants
- Head and neck cancer
- Medical treatments such as corticosteroids or organ transplant
- Specialized treatment for rheumatoid arthritis or Crohn's disease

Tuberculosis is a serious health threat, especially for people living with HIV. People living with HIV are more likely than others to become sick with TB. Worldwide, TB is one of the leading causes of death among people living with HIV.

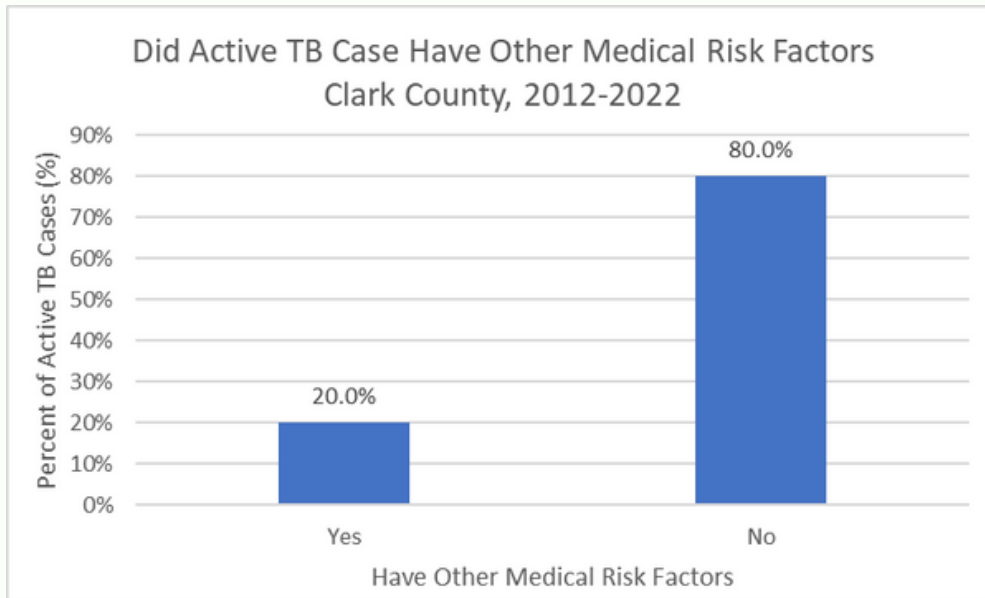
Someone with untreated latent TB infection and HIV infection is much more likely to develop TB disease/active TB during his or her lifetime than someone without HIV infection, HIV infection is the strongest known risk factor for progressing to TB disease. Without treatment, as with other opportunistic infections, HIV and TB can work together to shorten lifespan.

20.0% of the active TB cases in Clark County from 2012 to 2022\* have had a coinfection with HIV (Figure 11).

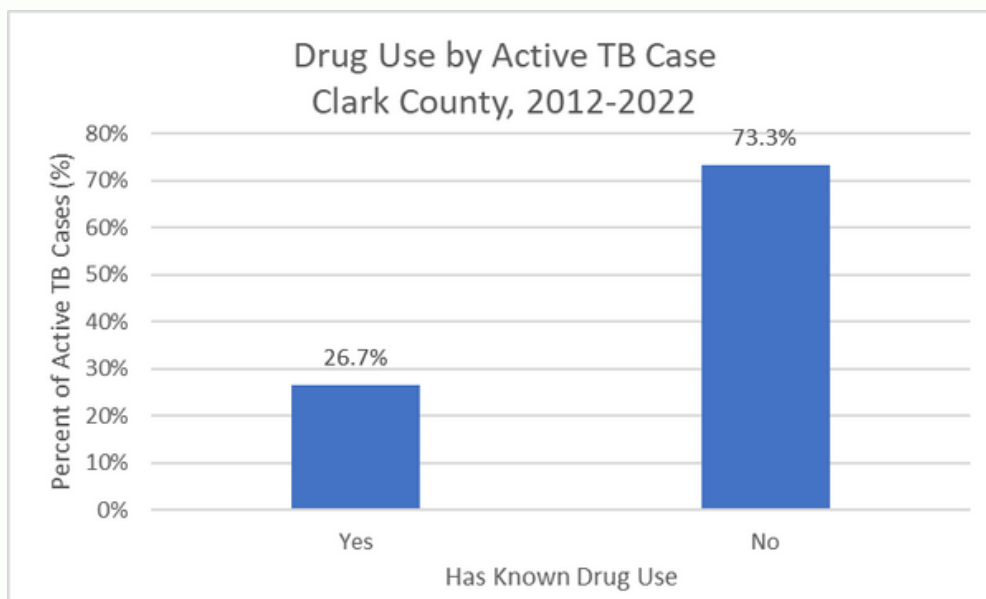


**Figure 11:** Active TB Cases in Clark County by Coinfection with HIV Status, 2012-2022\*. \*2022 numbers are preliminary and subject to change.

20.0% of the active TB cases in Clark County had other medical risk factors (besides HIV) (Figure 12). The other medical risk factors included contact with an infectious TB patient within the previous 2 years from diagnosis and diabetes. 26.7% of active TB cases in Clark County had known drug use (Figure 13). The known drug use included excess alcohol consumption and non-injecting drug use.

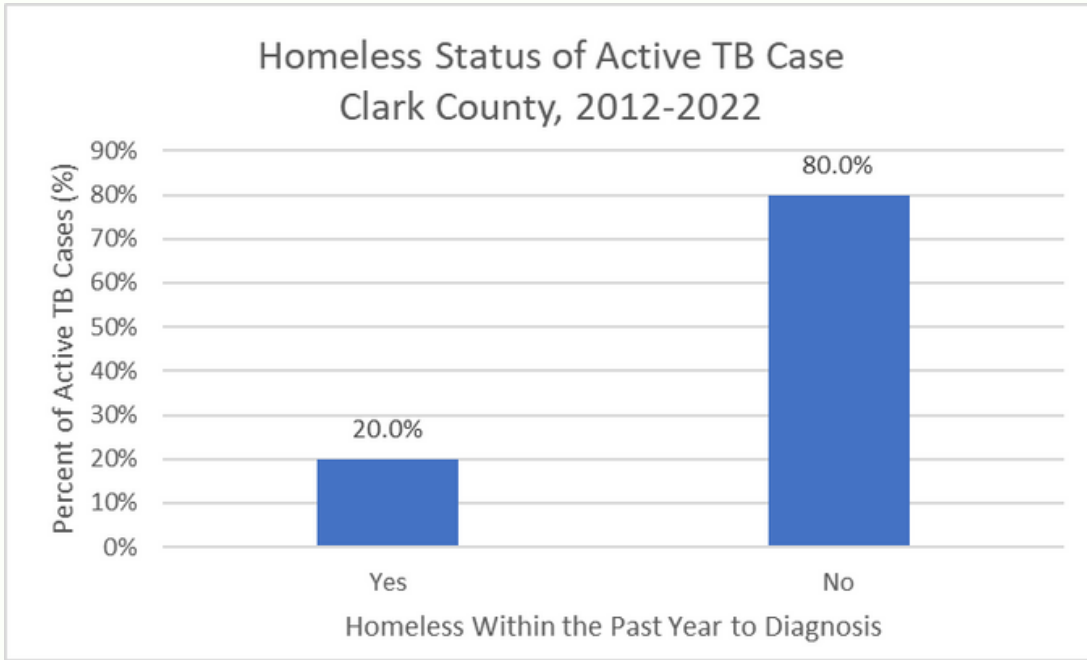


**Figure 12:** Active TB Cases in Clark County by Other Medical Risk Factors, 2012-2022\*. \*2022 numbers are preliminary and subject to change.



**Figure 13:** Active TB Cases in Clark County by Drug Use, 2012-2022\*. \*2022 numbers are preliminary and subject to change.

20.0% of active TB cases in Clark County from 2012 to 2022\* disclosed that within one year to the TB diagnosis they were homeless (Figure 14).



**Figure 14:** Active TB Cases in Clark County by Homeless Status, 2012-2022\*. \*2022 numbers are preliminary and subject to change.

## How has CCCHD Helped?

The Clark County Combined Health District (CCCHD) is required by the Ohio Revised Code (ORC) to investigate any suspected, probable or confirmed case of TB. When investigating a case, CCCHD has helped in many ways, including but not limited to:

<b>Food</b>	Provided food for cases when they could not leave their home due to isolation protocols.
<b>Housing</b>	Provided temporary housing for cases when they could not isolate away from others.
<b>Immigration</b>	Assisted cases or contacts with applying for relevant immigration status.
<b>Medical</b>	Connected cases or contacts with a primary care and getting insurance if they qualify.
<b>Medication</b>	Provided medication for cases or contacts when they were not established with an insurance yet.
<b>Translator(s)</b>	Provided a translator, in person or over the phone, for cases who did not speak English as their primary language.
<b>Transportation</b>	Provided transportation to appointments for cases or contacts with no access to transportation.