Community Case Study Scenario 15: Drug-resistant TB/Policy

Harper Jones, McLean Gaston, Aseel Mansour, Colin Cook

Table of Contents

Case Study

Andrew Speaker, a lawyer from Athens, GA, was diagnosed with active tuberculosis and later with multidrug-resistant TB back in April 2007. Initially believed to have drug-resistant TB extensively, Speaker was informed of the strain's difficulty in treating. Nevertheless, Speaker left the United States without notice for his destination wedding in Mexico. Following his wedding and return to the United States, Speaker faced both criticism and public sympathy as his story sparked a broader debate on health policies.

Health Section

Tuberculosis (TB) Overview

Tuberculosis (TB) is an infectious disease caused by the bacterium Mycobacterium tuberculosis. Before the COVID-19 pandemic, TB was considered the most prevalent contagious disease worldwide (Tobin EH, Tristram D, 2024). Tuberculosis generally affects the lungs and can be classified as either latent or active. If an individual has latent TB, they feel no symptoms and are unable to spread the disease to others. However, if the bacteria become stronger than the individual's immune system can withstand, this can progress to active TB. In active TB, infections of the lungs and larynx are typically severe, and the disease is highly transmissible to others (Yen, T. S., 2025).

Drug-resistant TB (DR-TB) develops when treatment of the disease is not completed, incorrectly administered, or interrupted, allowing for the *Mycobacterium tuberculosi*s to survive and adapt. Common factors contributing to mistreatment include poor access to healthcare, inconsistent drug usage, or patient noncompliance (Liebenberg et. al., 2022). DR-TB is a severe global public health concern, as its high risk of prolonged illness and death makes it a leading

cause of mortality worldwide. Multidrug-resistant TB (MDR-TB), a specific and severe form of DR-TB, involves resistance to one or more of the most effective anti-TB drugs, with the additional resistance to either Isoniazid or rifampin. Isoniazid or rifampin are the most effective TB drug (CDC, 2023).

The Georgia Department of Public Health reported 254 TB cases in the state in 2024. This shows a 3.3% increase from the prior year, setting the most up-to-date TB case rate at 2.3 per 100,000 persons in the state of Georgia (Georgia Department of Public Health, 2024). Compared to the national TB case rate of 2.9 per 100,000 in the United States in 2023, Georgia falls slightly below the average. However, these numbers are projected to rise based on provisional data from the 2024 report. (CDC, 2023). In Athens-Clarke County specifically, fewer than 5 TB cases were reported in 2024 (Georgia Department of Public Health, 2024). Additionally, it is essential to note that TB disproportionately affects developing countries due to limited access to vaccinations, screening methods, and treatment options.

Risk Factors of Tuberculosis

Drug-resistant tuberculosis (DR-TB) develops when the body becomes resistant to standard TB medications and can no longer fight off Mycobacterium tuberculosis. While anyone is vulnerable to infection, certain risk factors increase both the likelihood of initial infection and the probability that TB will progress to an active state. These heightened risk factors are divided into the following categories: weakened immune system factors, lifestyle and environmental factors, living and working conditions, and age (CDC, 2023). Individuals within one or more of these categories are more likely to require longer treatments and are at greater risk of DR-TB.

Risk Factors (Weakened Immune System)

People with weakened immune systems are highly susceptible to TB infection and progression to active disease, as their bodies are often unable to fight off the harmful Mycobacterium tuberculosis effectively. Conditions like HIV/AIDS, diabetes, severe kidney disease, and various cancers of the head, neck, or blood can weaken immune defenses, making it more difficult for the body to fight. Medical treatments can also lower the immune system's response and increase vulnerability to TB. Common treatments include chemotherapy, preventative organ transplant rejection medications, and long-term use of prescription steroids. When an impaired immune system weakens the body's ability to fight TB bacteria, TB bacteria multiply, increasing the risk of developing DR-TB (CDC, 2024).

Risk Factors (Lifestyle)

Lifestyle and environmental factors also play a significant role in the risk of Tuberculosis and drug-resistant Tuberculosis. Malnutrition and low body weight have proven to weaken the immune system, making it easier for TB bacteria to cause disease. Misuse of substances like alcohol, smoking, and the use of illicit drugs, especially injected drugs, also increases susceptibility to TB, as these behaviors can damage both lung health and immune responses. Living with these health disparities increases the chances of developing DR-TB, as the weakened body cannot fight off the TB bacteria. (Silva et al., 2018).

Risk Factors (Living and Working Conditions)

Living or working in crowded environments drastically increases the likelihood of TB transmission, along with a strong correlation with progression to active TB and DR-TB. One of the most common ways of exposure is living with someone who has active TB disease. Additionally, residing in or traveling to countries where TB is more common increases the risk of exposure. Regions with higher TB rates include parts of Latin America, Africa, Asia, and the

Pacific Islands. Within the United States, living or working in high-density areas like prisons, nursing homes, homeless shelters, etc., strongly correlates to rapid TB spread because these communities are close-quartered and typically have poor ventilation systems. Work specifically, healthcare workers and healthcare providers who are treating TB patients are at the highest risk of infection through frequent exposure to the disease (CDC, 2024)

Risk Factors (Non-U.S.-Born Persons)

Tuberculosis in the United States disproportionately affects non-U.S.-born persons and those from racial and ethnic minority groups (CDC, 2024). This is typically due to the greater risk of contracting the TB bacteria outside the United States. In fact, in 2023, 75.8% of all TB cases in the United States occurred among non-U.S.-born persons, putting these individuals at an 18.5 times higher incidence rate than those born in the U.S. In the state of Georgia specifically, 69.3% of all TB cases occurred among non-U.S.-born individuals. The most common countries of origin included Mexico (17.6%), India (12.5%), Guatemala (11.4%), and Vietnam (11.4%). In all four of these countries, TB is considered an endemic disease and poses a high risk for the people of their country (Georgia Department of Public Health, 2024).

Risk Factors (Age)

Different age groups are impacted and more vulnerable to TB infections than others. Young children under 5, young adults aged 15-25, and older adults aged 65+ are particularly vulnerable. It is due to their immune systems being either underdeveloped or weakened compared to those of other age groups. Breaking this down, younger children are at higher risk because their immune systems are underdeveloped. Young adults, while having a relatively well-developed immune system, are at higher risk due to greater exposure to the disease through social interactions and travel to new places. Lastly, older adults are found to be the most

vulnerable due to their age-related immune system decline and greater chances of facing other contributors like chronic disease and living conditions. (Mayo Clinic, 2025).

Prevention

Since TB is highly transmissible, prevention is key. In order to reduce the number of cases of TB each year, prevention methods are strongly recommended by healthcare providers, the Centers for Disease Control and Prevention, and the World Health Organization across the globe. However, in the United States, annual TB testing and prevention methods are not considered necessary unless there is a confirmed exposure (Centers for Disease Control and Prevention, 2025). One of the most well-known prevention strategies is the Bacillus Calmette-Guérin (BCG) vaccine. Developed in 1921, BCG is one of the most widely administered vaccines in the world and is usually given to children, citizens of developed countries, travelers, healthcare workers, and people who were exposed to multidrug-resistant TB. BCG vaccination is not historically associated with severe side effects; however, the injection site may experience minor complications due to the injection of the virus (Okafor CN, Rewane A, Momodu II., 2023).

Additionally, this vaccine may affect the tuberculin skin test (TST) reactivity, another TB prevention method. TST is a standard screening method, often administered in the United States, to detect the presence of the bacterium Mycobacterium tuberculosis in the body (MN Dept. of Health, 2024). Along with vaccinations and screening, other standard prevention methods include frequent handwashing and covering coughs (Cleveland Clinic, 2025). For employers, other prevention methods include proper education and workplace training, minimizing exposure to individuals with TB, and maintaining appropriate air-handling systems, especially in healthcare facilities.

Treatment

Despite tuberculosis's extreme burden of disease and immense global impact, it is, in fact, treatable. Treatment of TB is dependent on the progression and severity of the individual case. Despite the burden of TB across the globe, there are treatment options for all types of TB, including latent TB, active TB, and both forms of DR or MDR-TB. Once diagnosed with latent TB, the most effective way to prevent the development of active TB is to take all related medications exactly as they are prescribed (Centers for Disease Control and Prevention, 2025). For latent TB, the most common treatment plans may include the medications isoniazid, rifampin, or rifapentine.

On the other hand, active TB treatment is much more intense and typically involves taking multiple medications at once, spanning four to nine months. This includes medications such as ethambutol, isoniazid, moxifloxacin, rifampin, rifapentine, or pyrazinemide. For DR or MDR-TB, the treatment plan is adjusted based on which antibiotics the TB bacteria can be resistant to (Centers for Disease Control and Prevention, 2025). However, this can be extremely difficult based on the level of the bacteria's resistance.

Racial Disparities

The historical inequities surrounding tuberculosis (TB) treatment continue to affect minority populations today. Racial groups, such as Native Americans, African Americans, Asians, and Hispanics, are up to 14 times more likely to experience TB compared to their non-Hispanic White counterparts (Li, Yun-fe et al., 2024). While TB itself is not discriminant, access to healthcare and treatment varies, especially for individuals in these marginalized groups. In 2023, approximately 90% of TB cases occurred among ethnic minorities in the United States (CDC, 2023). These disparities highlight the entrenched nature of racism within the healthcare

system, including barriers such as limited access to care and a lack of services that are trusted and culturally competent. Without equitable care, these inequities will persist and may be further intensified by social determinants of health.

Social Determinants of Health

Economic Stability & Physical Environment

Poverty has remained a persistent facilitator of Tuberculosis. With 80% of cases and deaths occurring in low- and middle-income countries, TB is often referred to as the "disease of the poor" (WHO, 2025). Low-income communities are more likely to experience poor sanitation, malnutrition, and crowded housing, all of which make TB transmission more frequent and severe. Individuals facing financial instability also have limited access to healthcare, which leads to delayed diagnosis and treatment, which further allows TB to spread. Once infected, patients face challenges such as medical debt and missing work, exacerbating their financial strain (Lönnroth et al., 2014). This creates a cyclical relationship between poverty and TB, where one continues to reinforce the other and prolongs the effects of the disease.

Education

Health literacy is a determining factor in Tuberculosis prevention, early diagnosis, and treatment compliance. Over half (51.2%) of individuals infected with TB have limited health literacy (Chauhan et al., 2024). Individuals with low educational attainment, particularly marginalized groups such as low-income individuals, often face challenges in recognizing TB symptoms and understanding the necessity of treatment. When individuals cannot navigate the healthcare system and make informed care decisions, disease outcomes are likely to be worse. Additionally, misinformation compounds the issue of health literacy and reinforces stigma

regarding TB, preventing people from seeking care. This not only endangers the individual, but the community as a whole, as transmission will increase. This concern becomes increasingly urgent as the risk of multidrug-resistant TB strains continues to grow.

Food

Nutrition is an overlooked risk factor that influences the progression and treatment of Tuberculosis. With almost half (1 million) of all TB patients being malnourished, undernutrition weakens the immune system, increasing susceptibility to TB (Abdulla et al., 2023). Underweight individuals are also more likely to develop severe symptoms of active TB, causing them to be twice as likely to die from TB compared to individuals who are non-malnourished (Ter Beek et al., 2021). Malnutrition can also reduce the body's ability to respond to TB medications, which could lead to prolonged disease and its effects. This makes malnutrition and TB a comorbidity, with each worsening the outcomes of the other.

Community

Tuberculosis stigma differs around the world, depending on different cultural and social contexts. Although there is variation, the most common stigma upheld is that the disease is contagious (Courtwright et al., 2010). Additionally, TB is often linked to highly stigmatized conditions such as HIV and poverty, which further creates negative perceptions. In the southern United States, rural and low-income communities experience the most stigma. Individuals who experience TB stigma often feel socially excluded, may feel a loss of opportunities, and can be reluctant to seek medical care (Courtwright et al., 2010). This ultimately leads to individuals being diagnosed at later stages of disease, increasing the risk of transmission and worsening health outcomes.

Health Care System

In many countries, including the United States, Tuberculosis treatment is funded through government programs such as the CDC and the Global Fund. This is because TB is highly contagious and poses a significant public health threat. The average direct cost of treating TB in the United States is approximately $23,000, with prices being up to triple for multidrug-resistant tuberculosis (Winston et al., 2023). While treatment is often free, individuals may still incur out-of-pocket costs, such as initial testing and follow-up visits, depending on their insurance status and where they choose to seek care. Although medical care is covered, individuals most affected by TB, such as those from low-income communities, may still experience job loss and transportation barriers.

Policy

International Policy

TB prevention has been a significant global public health initiative for decades. Since 1997, the WHO has published a global TB report that provides annual updates on the spread of TB and the policies in place to fight it. (WHO, 2024a). Since the most recent report in 2024, 193 countries comprising 99% of the global population have reported data to the WHO (WHO, 2024a). Since 2014, the World Health Organization has used the global End TB Strategy to set guidelines for fighting TB, emphasizing early detection and universal treatment access, to reduce TB deaths by 95% the TB incidence rate by 90% by 2035 (WHOa, 2024a). The *End TB Strategy* utilizes a three-pillar method to achieve its reduction goals (WHO, 2024a). The first pillar focuses on integrated care and prevention, with an emphasis on universal access to early diagnosis and treatment. The second pillar focuses on political commitment and community engagement to finance and regulate TB prevention. The third pillar focuses on increasing the

volume of research and innovation in vaccines, medications, and TB prevention programs. The current global targets for 2025 include a 50% reduction in TB incidence and a 75% reduction in TB deaths. Currently, these numbers are 8.3% and 23%, respectively. (WHO, 2024a). In its 2024 report, the WHO stated "...global milestones and targets for reduction in TB disease are off-track and other targets set for 2027 at the second high-level meeting remain some way off."

Legal and Ethical Policies

In 2005, 196 countries signed the International Health Regulations (2005), which established the legal framework for managing public health events across borders (WHO, 2024b). The IHR established that countries are obligated to establish disease surveillance and response in addition to notifying the WHO of public health risks with potential global implications, while mandating that the WHO must coordinate international response and maintain the global public health early warning system (WHO, 2024b). The IHR specifies that TB-related events must be reported to the WHO if they may have a profound impact, pose a risk of international spread, or disrupt trade and travel. For air travel specifically, the IHR mandates contract tracing and isolation if an infectious traveller is known to have recently flown, in addition to potential non-invasive medical examinations for travellers on arrival or departure if deemed necessary (Plotkin et al., 2010). With respect to the rights of travellers, the IHR states that travellers are treated with respect for their dignity and human rights, and that they incur no financial cost for health measures applied to them on public health grounds (Plotkin et al., 2010).

Medical Compliance

TB medical compliance is documented to be difficult, with poor adherence common in low- and middle-income countries (Munro et al., 2007). Treatment interruptions and failure to adhere to treatment can be attributed to a variety of factors, including poverty, clinic

accessibility, motivation/knowledge, and TB stigma (Munro et al., 2007). Noncompliance can lead to a rise in drug-resistant TB, potentially leading to higher TB mortality, making it critical for patients to have better education and for providers to have better communication strategies to ensure higher adherence and treatment success (Sveinbjornsdottir et al., 2018). To combat this, TB treatment should balance patient autonomy with public health risks, as patient-centered approaches are critical to ensuring that TB care is sustainable, effective, and supportive of global TB control efforts.

Court-Mandated Compliance

Court-ordered isolation is a legal doctrine allowed for cases of TB in the United States (CDC, 2024). Under section 361 of the Public Health Services Act, the CDC may issue a federal isolation notice to anyone suspected of carrying a communicable disease (including TB) who refuses to isolate or seek treatment voluntarily (CDC, 2024). Additionally, public health authorities can seek assistance from law enforcement officials to enforce federal quarantine orders. Historically, the CDC has rarely issued federal quarantine orders outside of pandemics.

Needs Assessment

Hypothetically, an Athens resident faces a similar story to that of Andrew Speaker, as the patient is diagnosed with tuberculosis (TB) and later develops into drug-resistant tuberculosis (DR-TB). Within this case, various medical, ethical, and public health challenges need to be addressed. Despite medical advice, our patient decides to travel to Mexico for unknown reasons, raising national and international concerns about TB transmission, the enforcement of health policies, and coordination among foreign countries.

At the individual level, our patient requires accurate and timely information surrounding the severity of his condition, whether his condition has become DR-TB, and what public health risks may arise if he decides to travel domestically or internationally. In Andrew Speaker's case, miscommunication arose when determining whether Speaker had MDR-TB and whether he was at risk of spreading his strain of TB to others. Therefore, it is apparent that clear communication is needed as our patient's decision to leave Athens may stem from a lack of understanding of his diagnosis. Education can be a crucial way to help our patient understand the gravity of their condition and how it can impact others. Understanding that the people sitting in proximity on the flight may experience possible exposure and that the possibility of contracting DR-TB can have a profound impact on the patient and others' health is critical to achieving compliance.

Additionally, our patient may require specialized medical DR-TB treatment, quarantine measures, and even therapeutic support to help them manage the stress associated with the disease. Patients with MDR-TB have reported higher rates of depression and anxiety in addition to higher perceived stigma (Murugan et al., 2024). Ensuring that a patient has proper access to services can alleviate the emotional distress associated with prolonged treatment, isolation, and uncertainty. In the case of our Athens patient, more transparent communication and ethical guidance could have prevented travel to Mexico and protected their health and others with whom they might have come into contact.

At the institutional level, local, state, and national health departments require strong coordination to communicate efficiently with foreign governments, in this case, Mexico, and international health agencies when an infected patient travels globally. In the United States, the Do Not Board List was created in June 2007 by the CDC and the Department of Homeland Security (DHS), and is enforced by the Transportation Security Administration (TSA) under the

2002 Aviation and Transportation Security Act (49 U.S.C. 114). An individual is placed on this list after a local or state health department identifies them as uncooperative with treatment guidelines and as planning to travel soon. This is then reported to the CDC, which contacts the DHS and the TSA to put this individual on the Do Not Board List (Commonwealth of Pennsylvania, 2015). The TSA should then prevent the traveler from boarding a flight, and airlines are prevented from issuing boarding passes.

Additionally, individuals placed on the Do Not Board list are also placed on the Public Health Lookout. If the traveler attempts to enter the United States through any point of entry, Customs and Border Patrol is obligated to alert public health officials to ensure that the traveler is met and given appropriate care (CDC, 2024). Meanwhile, Mexico manages its TB response by providing free treatment to all patients, maintaining Directly Observed Therapy clinics, and working with the CDC to maintain continuity of care (CDC, 2024). This cross-border cooperation is an essential step for proper coordination and effective communication between the two governments.

In our hypothetical, this Athens resident would have slipped through these protocols because local health providers failed to communicate the patient's diagnosis to the CDC. Improving communication speed can ensure the CDC has sufficient time to place the individual on the Do Not Board and Public Health Lookout lists, preventing this individual from traveling and reducing the risk of in-flight transmission of TB.

On the community level, protection for those who may have been exposed to our TB patient during their trip to Mexico is essential. Treatment for those who may have come into contact with our patient includes offering TB skin and blood testing, screenings, and follow-up care. While the risk of exposure to individuals seated around our patient on the flight is low, tests

should still be administered to those seated around our patient to rule out exposure. In addition to direct treatment, public education programs and campaigns should be implemented to inform communities about TB transmission and prevention. Providing the proper funding for these programs is also critical to ensuring that communities understand the risks of TB, MDR-TB, and how to handle potential cases within their community. Identifying the Athens communities with the highest (albeit low) likelihood of exposure to TB can guide the educational materials and methods used to protect their communities. Alongside this, contact tracing resources can further help prevent secondary outbreaks while maintaining public health.

In the conclusion of our hypothetical TB case in Athens, both medical and ethical support are essential when addressing individual, institutional, and community-level support. Through improved education, communication, and international collaboration, we can further address these gaps in our system. Improving each of these three levels can not only protect individual patients but also all those at risk of exposure and reinforce public health safety.

Available Resources

Georgia Department of Public Health (GDPH)

The Georgia Department of Public Health (GDPH) combats tuberculosis in the state through a policy-making approach within the Georgia TB Program. Their vision, "a Georgia free of TB," aligns with their mission statement, which includes controlling the transmission of TB through treatment, education, contact tracing, and screening. While the Georgia TB Program does not directly treat patients, it is legally responsible for all tuberculosis clients and those considered close contacts within the state of Georgia. This means the Georgia TB Program, developed under the GDPH, develops procedures to ensure that Georgia residents receive the

proper care and resources they need. However, these resources are typically delivered at the local level or in a hospital setting. From a policy standpoint, the GDPH is responsible for ensuring that all local health departments across the state provide available TB control services accessible to all Georgia residents, regardless of socioeconomic status or income. GDPH serves as an oversight body for effective treatment and supervision of TB cases in the state, ensuring that Georgia residents are correctly cared for in accordance with CDC guidelines. This allows for physicians, healthcare providers, and public institutions to stay up to date on tuberculosis policy while providing quality services to Georgia residents.

Additionally, GDPH oversees reporting mechanisms of all diagnosed, suspected, or contact-traced cases of tuberculosis that have occurred within state borders, including latent and active TB. The detailed guidelines of reporting are outlined in Rule 511-2-3-02 of the Official Code of Georgia Annotated (O.C.G.A). This rule states that a person with a positive sputum (saliva or mucus test) due to pulmonary tuberculosis, who refuses to take prescribed chemotherapy, is considered a threat to the health of the community due to the transmission of the bacteria and the possibility of that person developing DR-TB in the future. The law further states that these persons should be reported to the GDPH through the local county health department, depending on the location of the specific case. Finally, once treatment is completed, GDPH is notified of discharge, and the Georgia TB Program releases the patient from supervision. To view the Rules and Regulations of the State of Georgia regarding Tuberculosis Control at the state level, view this link here: https://rules.sos.state.ga.us/GAC/511-2-3.

Athens-Clarke County Health Department (Northeast Health District)

While the state health department (GDPH) develops laws and procedures for suspected tuberculosis cases across the entire state of Georgia, local county health departments are

responsible for implementing them. This includes issuing reporting and treatment guidelines for their specific counties. Athens-Clarke County Main Health Department is located at 354 North Harris Street, Athens, GA 30601. They are open Monday through Friday and provide services for all Georgia residents. The best way to contact them is by phone at (706) 389-6921. Under subject 511-2-3-03 of the Official Code of Georgia Annotated (O.C.G.A), the duties and responsibilities of the Athens-Clarke County Health Department are outlined to prevent the spread of tuberculosis throughout the county. To avoid outbreaks and ensure effective treatment, the Athens-Clarke County Health Department offers TB testing to all Georgia residents for a "small fee." This fee is not specified on the website, but can range anywhere from $0 to $140, depending on the patient's insurance coverage and out-of-pocket costs. If a TB test comes back positive, the Athens-Clarke County Health Department is required to report the case to the Georgia Department of Public Health, which then reports it to the CDC. The most efficient way to report a suspected case of tuberculosis is to call the phone number above. However, cases may also be reported electronically through the State Electronic Notifiable Disease Surveillance System (SENDSS) at the following link: https://sendss.state.ga.us. If a Georgia resident needs tuberculosis treatment, the Athens-Clarke County Health Department will provide them with a written plan that explains, in detail, the required patient cooperation. This includes an overview of the prescription drugs — such as Isoniazid, Rifampin, Pyrazinamide, and Ethambutol — a schedule for when to take them, and a lesson on the value of treatment and recovery. Not only does this treatment plan provide the patient with the medication they need, but it also serves as an educational resource that strengthens their understanding of the severity of the disease and how it can threaten the community if it spreads. It is important to note that treatment plans do not need to be completed at the local health department; they can be completed at another institution,

with a local physician or infectious disease professional. For example, *Infectious Disease Specialists of Athens (St. Mary's Healthcare System)* offers tuberculosis treatment with an emphasis on knowledge, prevention, and compassionate treatment. They treat patients by appointment only and can be contacted by phone at (706) 559-4405. Infectious Disease Specialists of Athens is open Monday through Friday, and its clinic is located at 1500 Oglethorpe Ave, Ste 200D, Athens, GA 30606. They follow CDC and local health department guidelines to ensure quality care for Athens residents. Suppose a patient is noncompliant with the treatment plan and rules specified by the Athens-Clarke County Health Department under subject 511-2-3-03 of the O.C.G.A. In that case, there may be legal consequences due to the severity of tuberculosis and the risk that it may develop into DR-TB. These may include an issued quarantine order, judicial order, institute injunction, or other judicial enforcement action against the patient.

Centers for Disease Control and Prevention (CDC)

The Centers for Disease Control and Prevention (CDC) is the primary federal public health agency responsible for preventing and controlling diseases and injuries in the United States. The CDC coordinates between states and countries to help maintain national health security. Under the Public Health Service Act, the CDC has legal authority to restrict the travel of individuals who are infected with infectious diseases, such as Tuberculosis (TB). This includes placing individuals on the "Do Not Board" List to prevent the transmission of disease via air travel. This also ensures that individuals do not leave the state until completing treatment. The CDC provides national and laboratory guidance for TB diagnosis. Local health departments test for TB and report to the Georgia Department of Health (GDPH), which then coordinates with the CDC for monitoring, contact tracing, and enforcement of travel restrictions.

Additionally, the CDC provides guidelines for Directly Observed Therapy (DOT) to guarantee individuals take their medication. This is especially important in cases of drug-resistant TB. The CDC is located at 1600 Clifton Rd NE, Atlanta, GA 30333, and can be reached by phone at (404)-639-3311. Although the CDC plays a massive role in TB management, it should not be your first point of contact for immediate assistance. Athens-Clarke County Health Department should be contacted first for initial testing and treatment. The CDC will then be involved, especially for cases traveling outside the United States.

CureTB Program (Under the CDC)

Another subsection of the CDC is titled the CureTB Program, which is managed by the CDC Division of Global Migration and Health's Southern Border Health and Migration branch. This division collaborates with numerous health authorities worldwide. The goal of the CureTB Program is to prevent the spread of TB amongst those who travel between the United States and other countries. Through this program, individuals are referred to public health resources in their destination countries. With Mexico being the primary source of TB via migration to the United States, this program helps ensure treatment continues seamlessly. This program will work closely with local public health officials. Additionally, healthcare providers can use the CureTB Transactional Notification Form to refer their patients and track their treatment progress. For more information on this program, contact Cure TB by email: CureTB@cdc.gov, or call: (619)-542-4013.

Legal Services/Representation (Georgia Legal Services Program/Private Law Firms)

The Georgia Legal Services Program (GLSP) and other private law firms offer legal assistance. GLSP is located at 1865 W Broad St Unit B, Athens, GA 30606, and can be reached by phone at (706)-227-5362. When individuals refuse to comply with enforced treatment and

isolation, legal representation can help address concerns about a patient's rights. Their attorney can help clarify the patient's rights and assist with mandated court-ordered quarantine. For an individual facing drug-resistant TB, where noncompliance can be detrimental to public health, legal services can also support the enforcement of travel restrictions. Legal representatives can assist in understanding available programs, like the CureTB Program, which can ensure care continuity across borders.

Sustainable Solutions

Examples from Across the Nation

Sustainable solutions and interventions in Georgia regarding tuberculosis prevention and treatment should also be heavily influenced by successful programs nationwide. For instance, the Texas Binational Tuberculosis Program ("Los Dos Laredos") provides prevention and care to residents of Texas and border cities of Mexico, such as Laredo and Nuevo Laredo. Not only does this program provide participants with quality treatment, but it also strives to educate its patients and provide training materials to those who are affected by the patient. Due to this emphasis on quality, the Texas Binational Tuberculosis Program reported that 100% of its patients completed their personalized TB treatment plans in 2023 (Centers for Disease Control and Prevention, 2024). While the state of Georgia does not have to focus on border control specifically, it is evident from Andrew Speaker's case that travel still affects Georgia residents when it comes to TB rates. That said, the state of Georgia should consider similar programs to those in Texas to assist in preventing and treating its residents. Rather than relying solely on prevention and treatment, Georgia should provide stronger educational resources on TB for its residents, despite the state's low prevalence of the disease.

Because the prevalence of tuberculosis in Athens-Clarke County is not particularly high compared to other counties, future solutions across the state could also place greater emphasis on screening. Amber Hunwardsen, a registered nurse with the Siouxland District Health Department in Sioux City, Iowa, sought to address tuberculosis challenges at the local level. Through her community-based intervention, Amber helped implement regular workplace TB screenings across the county in order to reduce the burden of tuberculosis before it spreads in the workplace. Additionally, Amber helped make a plan for stronger communication between clinics and the local health department in the Siouxland District (Centers for Disease Control and Prevention, 2024). Along with this idea, the Black Hawk County Health Department in Waterloo, Iowa, emphasizes support and care for the families of TB patients in the county. In fact, Black Hawk County has a team of nine members who serve as an active resource for screening, treatment, and support for those infected with TB and their family members (Centers for Disease Control and Prevention, 2024). These successful interventions and research methods, incorporated in other states, can serve as examples for Georgia to follow when designing future interventions.

Community-level Sustainability

In local communities such as Athens-Clarke County, where TB incidence is low, risk factors still exist. For example, non-U.S.-born individuals account for approximately 70% of cases experienced in Georgia (Georgia Department of Public Health). Additionally, in Georgia, other high-risk populations include individuals with HIV, children, and individuals who reside or work in crowded areas (Georgia Department of Public Health). Therefore, interventions should focus on protective measures that target communities at higher risk. Studies have shown that community support that extends beyond clinical settings has led to better outcomes for all. Active case-finding (ACF) of TB through mobile screening, community education programs, and

neighborhood outreach treats more individuals, particularly those who go undiagnosed (Burke et al., 2021). This works particularly well in areas with low TB prevalence, as proactivity can ensure early diagnosis and prevent transmission.

In Vietnam, a large-scale community effort that utilized sputum testing significantly reduced TB in high-burden regions, showing that neighborhood-level screening can effectively lower community transmission rates (Marks et al., 2019). Although this intervention occurred in a high-prevalence setting, its core strategies remain applicable to lower-prevalence areas like Athens-Clarke County to sustain low incidence. Similarly, in the United States, outreach interventions have previously focused on serving individuals who are homeless. TB cases saw a drastic decrease from 15 cases to zero cases over 10 years after implementing treatment support and shelter-based programs (Cegielski et al., 2013). For Athens-Clarke County, which faces a growing homeless population, similar strategies could ensure direct support for vulnerable residents while protecting overall community health.

Early detection, however, must be paired with treatment retention. Community-based treatment models have shown higher success rates compared to hospital-focused care (Williams et al., 2016). Community health workers (CHWs) are trusted members of the community who provide education and health services, acting as a mediator between the healthcare system and patients (WHO). In Athens, implementing CHW-led programs could include home- or shelter-based follow-ups, coordinating medication pickups, and providing transportation to individuals. To make this initiative more affordable, University of Georgia students could be trained for CHW programs. Additionally, partnerships with nonprofits or federally qualified health centers can help distribute the workload and resources.

At the basis of detection and treatment is community engagement. Studies have shown that a mixture of community health workers (CWHs), volunteers, leaders, and non-governmental organizations (NGOs) can help reduce overall stigma surrounding TB. In Athens, collaboration with health centers, religious organizations, student services, and neighborhood leaders can help amplify TB awareness and education for all individuals, regardless of risk.

University of Georgia's Response

While a Tuberculosis (TB) outbreak would be rare at the University of Georgia (UGA), the university has protocols in place to coordinate with public health authorities in the event of epidemics. Since UGA opened its doors 240 years ago, the university has closed only five times: twice for disease and once for war. Throughout each outbreak UGA has experienced, the university has taken affirmative action to fight the disease, whether by quarantining students, temporarily suspending unvaccinated students, or even implementing complete campus shutdowns when necessary. While severe outbreaks have been sporadic in UGA's long history, the 1918 influenza pandemic, the 1990 measles outbreak, and most recently the COVID-19 pandemic all spread throughout campus, leading to irreversible health policy changes.

The first time UGA experienced a temporary closure due to disease was in the Fall of 1918, when influenza, also known as the Spanish flu, spread quickly throughout campus. While this may have been the first time due to disease, it was not the first time UGA had closed. The university had only temporarily closed before, from September 1863 to January 1866, due to the Civil War (Historic Athens Welcome Center, n.d.). To help control the spread of the disease, the university temporarily closed for several weeks. During this time, students were quarantined, classes were paused, and gatherings were prohibited while the university worked alongside local

health officials across Athens and other counties to contain the epidemic (Athens Historical Society, 2020).

The next-largest outbreak UGA faced on campus was the 1990 measles outbreak. While this epidemic did not result in another campus-wide shutdown like the Civil War and Influenza, it did lead UGA to suspend unvaccinated students temporarily and to require strict immunization requirements upon return. In partnership with local public health authorities, UGA sponsored vaccination drives and enforced compliance among students, faculty, and staff (Ulmer M, 2021).

The third and most recent disease outbreak at UGA is the COVID-19 pandemic. This disease also led to the third school-wide shutdown from March 2020 to August 2020. When COVID-19 hit the state of Georgia, immediate policies were put into action, and classes were moved from in-person to online. When the university returned to in-person courses in the Fall of 2020, health measures such as the DawgCheck symptom-reporting platform were put in place. Additionally, contact tracing and quarantine housing for students who tested positive helped control the disease. As the pandemic continued into 2021, UGA offered vaccination clinics to all students, faculty, and staff. Unlike the 1918 influenza outbreak, the campus did not fully shut down as critical research centers, housing, and safety operations remained open under strict supervision (University Health Center, University of Georgia, n.d.).

Given UGA's history of taking action during disease outbreaks, it is reasonable to expect the university to take affirmative steps in the event of a TB or DR-TB epidemic with the same efforts to keep the health of all students, faculty, and staff at the highest level. Building on actions taken during the 1918 influenza pandemic, the 1990 measles outbreak, and the COVID-19 pandemic, UGA would likely assess the severity of the epidemic, coordinate with both local and state health departments, and implement the necessary protocols. Protocols

surrounding TB may include identifying cases, conducting contact tracing, providing testing, and offering treatment options to all potentially infected individuals.

Noncompliance Solutions

Solutions to curtail noncompliance can enhance public health's response to fight tuberculosis while encouraging those afflicted to seek the proper treatment. The decision by an individual whether to seek treatment or not can have a massive impact on the condition of a community and the risk of an outbreak occurring, especially in instances where MDR-TB is in play, as treatment non-compliance increases the likelihood of ongoing transmission and the development of more severe drug-resistant strains. While the transmission of TB in Athens-Clarke County is low, it is still essential for procedures and protocols to be instituted to prevent the opportunity for an outbreak to occur.

Solutions should focus on educating the community about TB. A 2022 intervention study found that teaching family members how to support a TB patient, by monitoring their treatment doses, making medication reminders, accompanying the patient during clinic visits during their treatment, led to TB patients feeling higher levels of support and altered their day-to-day behaviors, improving medical compliance (Mariani et al., 2022). The training period for this study lasted 2 days, during which patients' families received proper training. Creating low-cost, relatively low-time commitment solutions like these can provide temporary, short-term options for members of the Athens-Clarke County community who may struggle to assist their friends and family in maintaining long-term TB treatment. Additionally, partnering with programs such as the "Tuberculosis Elimination Alliance" can bring in outside help to the community to assist with outreach and can further the education of TB testing and treatment (Centers for Disease Control and Prevention, 2024)

Additionally, solutions should focus on reducing the barriers to treatment, including transportation, flexible medical hours, and cost reductions. Reducing the barriers to treatment can improve accessibility options for low-income patients. The long nature of the treatment regime makes it difficult for TB patients to sustain constant adherence, particularly when symptoms subside, and motivation declines over time (Spence et al., 2023). Integrating these solutions can support the existing public health system to create a sustainable framework that promotes compliance and strengthens long-term TB control within the community.

Resource Handout

GEORGIA DEPARTMENT OF PUBLIC HEALTH
200 Piedmont Avenue, SE Atlanta, GA 30334
404-657-2700, contactpublichealth@dph.ga.gov

The Georgia Department of Public Health (GDPH) is a statewide public health agency that aims to improve the health of individuals and communities across Georgia. They coordinate funding efforts and offer immunization, treatment, and preventative services through local health departments. Among these services are initial testing, diagnosis, and treatment provided for little to no cost. All programs are designed to be culturally inclusive, accessible, and financially considerate. These efforts help ensure that individuals receive effective and timely care for many conditions, including tuberculosis. https://dph.georgia.gov/

ATHENS-CLARKE COUNTY HEALTH DEPARTMENT
345 North Harris Street, Athens, GA 30601
706-389-6921, district10.pio@dph.ga.gov

The Athens-Clarke County Health Department, part of the Northeast Health District, provides a wide range of health services to the Athens community. These services include routine and specialized care to meet diverse individual needs, including those related to tuberculosis. In addition to clinical care, the department offers preventive programs, including screenings and education. The goal of this agency is to protect and promote the health of all residents through assessing needs and ensuring compliance with health regulations.
https://northeasthealthdistrict.org/locations/clarke-county/

CENTERS FOR DISEASE CONTROL AND PREVENTION
1600 Clifton Road, Atlanta, GA 30329
1-800-232-4636, findtbresources@cdc.gov

The Centers for Disease Control and Prevention (CDC) is a national public health agency that aims to protect the health of people in the United States and around the world. The CDC provides many resources, ranging from data and guidelines to research findings, to improve health outcomes. Their efforts cover a comprehensive range of communicable diseases, such as tuberculosis and influenza, as well as noncommunicable diseases, such as chronic heart disease. In addition to disease interventions, the CDC addresses public health threats, including environmental hazards. Through its CureTB program, the CDC works to eliminate tuberculosis and support ongoing treatment efforts both domestically and internationally. Through its impact, the CDC has enhanced the quality of life for communities worldwide. https://www.cdc.gov/

GEORGIA LEGAL SERVICES PROGRAM - ATHENS OFFICE
1865 West Broad St Unit B, Athens, GA 30606
706-227-5362, cking@glsp.org

The Athens office of the Georgia Legal Services Program (GLSP), a 501(c)(3) nonprofit organization, provides free civil legal services to low-income individuals. GLSP aids families in understanding their legal rights, particularly in cases pertaining to health isolation orders and travel restrictions due to contagious diseases like tuberculosis. Their attorneys can assist individuals in navigating these orders and explaining their rights. In addition to health-related legal services, GLSP provides support in a variety of other areas. Their mission is to ensure that underserved individuals in Athens can receive fair treatment under the law. https://www.glsp.org/

References

Abdulla, J. H., Gebremichael, B., Maruta, M. B., Yuye, I., Mohammed, A., Debella, A., & Mussa, I. (2023). Nearly one out of every five adult TB patients suffered from food insecurity in Grawa District, Eastern Ethiopia: A multicenter facility-based cross-sectional study. *Frontiers in Public Health, 11*, 1177618. https://doi.org/10.3389/fpubh.2023.1177618

Athens Historical Society. (2020, November 18). Athens' first pandemic: 1918. https://www.athenshistorical.org/athens-first-pandemic-1918/#:~:text=coughing%20spells%2C%20intense%20pain%2C%20and,skin%20turning%20a%20deep%20blue.&text=pool%20or%20billiard%20rooms%2C%20amusement,I%20was%20still%20raging%20abroad.&text=public%20places.,Photos%20show%20people%20wearing%20masks.&text=and%20apparently%20the%20city%20suffered,virus%20will%20be%20making%20history .

Centers for Disease Control and Prevention, C. f. D. C. a. (2024). Legal Authorities for Isolation and Quarantine. Retrieved September 30 from https://www.cdc.gov/port-health/legal-authorities/isolation-quarantine.html

Centers for Disease Control and Prevention. (2023). *2023 tuberculosis surveillance report: Demographics*. Centers for Disease Control and Prevention. https://www.cdc.gov/tb-surveillance-report-2023/summary/demographics.html

Centers for Disease Control and Prevention. (2023). *About drug-resistant tuberculosis disease*. Retrieved from https://www.cdc.gov/tb/about/drug-resistant.html CDC

Centers for Disease Control and Prevention. (2023). *Tuberculosis risk factors*. Retrieved from https://www.cdc.gov/tb/risk-factors/index.html

Centers for Disease Control and Prevention. (2025, April 17). Preventing tuberculosis. Centers for Disease Control and Prevention. https://www.cdc.gov/tb/prevention/index.html#cdc_prevention_pre-prevention-steps-and-strategies

Centers for Disease Control and Prevention. (2024, December 9). 2024 U.S. TB Elimination Champions. https://www.cdc.gov/world-tb-day/us-champions/2024.html

Centers for Disease Control and Prevention. (2024). *Travel Restrictions to Prevent the Spread of Contagious Disease*. Retrieved October 30 from https://www.cdc.gov/port-health/travel-restrictions/index.html

Chauhan, A., Parmar, M., Dash, G. C., Chauhan, S., Sahoo, K. C., Samantaray, K., Sharma, J., Mahapatra, P., & Pati, S. (2024). Health literacy and tuberculosis control: Systematic review and meta-analysis. *Bulletin of the World Health Organization, 102*(6), 421–431. https://doi.org/10.2471/BLT.23.290396

Cleveland Clinic. (2025, June 2). Tuberculosis. https://my.clevelandclinic.org/health/diseases/11301-tuberculosis

Columbia Center for New Media Teaching and Learning. (2007). The elusive tuberculosis case: The CDC and Andrew Speaker. Retrieved from https://ccnmtl.columbia.edu/projects/caseconsortium/casestudies/114/casestudy/www/layout/case_id_114.html

Georgia Department of Public Health, 2024 Georgia Tuberculosis Surveillance Report, Atlanta, Georgia, August 2025.

Historic Athens Welcome Center. (n.d.). Self-guided tour of Civil War history. https://www.athenswelcomecenter.com/selfguided-tours-of-athens/civil-war#:~:text=The%20site%20of%20America's%20oldest,was%20occupied%20by%20Federal%20troops .

Implementing the WHO Stop TB Strategy: A Handbook for National Tuberculosis Control Programmes. Geneva: World Health Organization; 2008. 7, Isoniazid preventive therapy. Available from: https://www.ncbi.nlm.nih.gov/books/NBK310749/

Li, Y., Regan, M., Swartwood, N. A., Barham, T., Beeler Asay, G. R., Cohen, T., Hill, A. N., Horsburgh Jr, C. R., Khan, A., Marks, S. M., Myles, R. L., Salomon, J. A., Self, J. L., & Menzies, N. A. (2024). Disparities in tuberculosis incidence by race and ethnicity among the U.S.-born population in the United States, 2011 to 2021: An analysis of national disease registry data. *Annals of Internal Medicine, 177*(4), 418–427. https://doi.org/10.7326/M23-29

Liebenberg, D., & colleagues. (2022). Drug-resistant tuberculosis: Implications for transmission. PMC. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC9538507/

Lönnroth, K., Glaziou, P., Weil, D., Floyd, K., Uplekar, M., & Raviglione, M. (2014). Beyond UHC: Monitoring health and social protection coverage in the context of tuberculosis care and prevention. *PLoS Medicine, 11*(9), e1001693. https://doi.org/10.1371/journal.pmed.1001693

Mayo Clinic. (2025). Tuberculosis: Symptoms & causes. Retrieved from https://www.mayoclinic.org/diseases-conditions/tuberculosis/symptoms-causes/syc-20351250

MN Dept. of Health. (2024, August 27). Tuberculin Skin Test (TST). Tuberculin Skin Test (TST) - MN Dept. of Health. https://www.health.state.mn.us/diseases/tb/tst.html

Murugan, Y., Patel, N., Kumar, V., & Gandhi, R. (2024). Mental Health Impacts of Multidrug-Resistant Tuberculosis in Patients and Household Contacts: A Mixed Methods Study. Cureus, 16(5), e60412. https://doi.org/10.7759/cureus.60412

Munro, S. A., Lewin, S. A., Smith, H. J., Engel, M. E., Fretheim, A., & Volmink, J. (2007). Patient adherence to tuberculosis treatment: a systematic review of qualitative research. PLoS Med, 4(7), e238. https://doi.org/10.1371/journal.pmed.0040238

Okafor CN, Rewane A, Momodu II. Bacillus Calmette Guerin. [Updated 2023 Jul 3]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK538185/

Plotkin, B. J., & Hardiman, M. C. (2010). The international health regulations (2005): tuberculosis and air travel. Travel Med Infect Dis, 8(2), 90–95. https://doi.org/10.1016/j.tmaid.2009.11.003

Pennsylvania, C. o. (2015). *Flight Investigations and the Do Not Board List*. https://www.pa.gov/content/dam/copapwp-pagov/en/health/documents/topics/documents/diseases-and-conditions/tb/Flight%20Investigations%20and%20the%20Do%20Not%20Board%20List%20Dec%202015.pdf

Silva, D. R., & coauthors. (2018). Risk factors for tuberculosis: Diabetes, smoking, alcohol use, and the use of other drugs. Jornal Brasileiro de Pneumologia. https://pubmed.ncbi.nlm.nih.gov/29791552/

Sveinbjornsdottir, G. M., Kamowa, D., Katundu, P. N., & Gizurarson, S. (2024). Compliance and illiteracy when treating tuberculosis. Int Health, 16(1), 126–128. https://doi.org/10.1093/inthealth/ihad077

Ter Beek, L., Bolhuis, M. S., Jager-Wittenaar, H., Brijan, R. X. D., Sturkenboom, M. G. G., Kerstjens, H. A. M., et al. (2021). Malnutrition assessment methods in adult patients with tuberculosis: A systematic review. *BMJ Open, 11*(12), e049777. https://doi.org/10.1136/bmjopen-2021-049777

Tobin EH, Tristram D. Tuberculosis Overview. [Updated 2024 Dec 22]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK441916/

Ulmer, M. (2021, August 10). UGA's measles outbreak vs. COVID-19: 1990s era vaccination mandate. 11Alive. https://www.11alive.com/article/news/health/coronavirus/1991-uga-measles-outbreak-mandated-vaccine/85-1093ad1c-683c-4414-959c-1448d28387e9

University Health Center, University of Georgia. (n.d.). Coronavirus. https://healthcenter.uga.edu/healthtopics/coronavirus/

U.S. Department of Labor. (n.d.). Tuberculosis - control and prevention. Occupational Safety and Health Administration. https://www.osha.gov/tuberculosis/control-prevention

Winston, C. A., Marks, S. M., & Carr, W. (2023). Estimated Costs of 4-Month Pulmonary Tuberculosis Treatment Regimen, United States. *Emerging infectious diseases*, *29*(10), 2102–2104. https://doi.org/10.3201/eid2910.230314

World Health Organization, W. H. (2024). Global Tuberculosis Report 2024. https://iris.who.int/server/api/core/bitstreams/7292c91e-ffb0-4cef-ac39-0200f06961ea/content

World Health Organization, W. H. (2024). International Health Regulations. Retrieved September 30 from https://www.who.int/health-topics/international-health-regulations#tab=tab_1

World Health Organization. (n.d.). *Tuberculosis*. World Health Organization. https://www.who.int/news-room/fact-sheets/detail/tuberculosis

Yen, T. S. (2025, August 28). Latent and active tuberculosis: what is the difference? National Centre for Infectious Diseases, Singapore. https://www.ncid.sg/Health-Professionals/Articles/Pages/Latent-and-Active-Tuberculosis,-What-Is-the-Difference.aspx

Personal Reflection

Aseel Mansour:

The first thing I learned from this case was how unequal the experience of having tuberculosis can be, depending on the individual, their circumstances, and the resources they have. Andrew Speaker's story is a living example of this: as a wealthy White man with social stature, he had the means to travel even against medical advice. Even though his actions put other individuals at risk, he still had access to legal support and media coverage that helped frame his situation favorably. In contrast, communities such as non-U.S. -born individuals, low-income populations, and people experiencing houselessness, cannot afford to move freely or ignore advice from public health officials without consequences. They also don't make headlines, as oftentimes these conditions are normalized. Comparing these two realities makes the inequities being experienced feel even more undeniable.

This community assessment also made me reflect on how influential social support and stigma are in shaping people's helpseeking behaviors. I learned that around the world tuberculosis can be socially understood and interpreted. For example, in parts of Africa tuberculosis can be associated with witchcraft. In the United States, tuberculosis can be tied to misconceptions about poverty, HIV, or immigration status. These narratives often lead to victim-blaming directed at communities who may little to no have control over their conditions. This made me more aware of the need for culturally sensitive practices when it comes to treating diseases such as tuberculosis.

Going forward, I'd like to study epidemiology. This case has solidified my interest in working to share the stories of communities who are underserved. Lack of reporting and

surveillance can cause disproportionate harm, and I am eager to make sure all individuals are reflected in data and media.

Harper Jones:

One of the biggest challenges that our group faced was compiling the information of our community resources in Athens. Since tuberculosis is not extremely prevalent in the United States, it was difficult to find data and resources for TB specific to Athens. Despite this lack of prevalence in the United States, TB poses an extremely high mortality rate for those who are unable to receive proper medication and treatment plans. Due to this severity, I think it is slightly concerning that there are so few resources for those in need. In Andrew Speaker's case, most of the problems he encountered were due to personal noncompliance choices. However, if there were more educational resources in place, or his treatment plan was explained in a clearer and concise manner, Speaker may have made different choices regarding his travel plans.

Throughout this community needs assessment paper, I learned the importance of communication between local health departments, state health departments, and healthcare providers. Since our group chose a policy-oriented case, I also learned the consequences and significance of medical noncompliance, especially for diseases like TB, where the government is required to be involved. These issues of medical noncompliance and accessibility matter because it emphasizes the fact that accessible resources are just as important as the medical interventions themselves. Improving resources, such as the ones listed in this needs assessment, should be further implemented to increase access to screening methods in order to reduce the burden of TB overall.

Going forward, I believe this assignment will help me while developing my professional career as a future healthcare provider myself. I am now more understanding and empathetic towards medical noncompliant individuals, and understand that frustration within the medical field may often be due to a lack of education or resources. In the future, I am eager to take the lessons I have learned about medical noncompliance into my career plans. Additionally, this assignment has allowed me to become more aware of the lack of resources and communication between agencies. Showing compassion towards patients, increasing healthcare communication, and improving education are ideas that I look forward to advocating for in the future.

Colin Cook:

My biggest takeaway from this needs assessment was that TB is a serious illness that has historically had rigid protocols in place for its treatment and prevention. While our case study scenario does feature a famous case in which an individual refused compliance, I was surprised by the sheer number of protocols and policies in place to prevent a rare, unique scenario such as Andrew Speaker's from occurring. I spent most of this needs assessment focused on the policy side of TB. I found it intriguing reading up on laws such as the Public Health Lookout, Public Health Services Act, and the Do Not Board List, and how they establish the federal government's authority to restrict travel, enforce isolation or quarantine, and coordinate responses across agencies during public health emergencies, not just ones limited to Tuberculosis.

Additionally, I was surprised by how global tuberculosis is, and researching the historical fight against the pathogen. Tuberculosis is a rather uncommon illness contracted in the United States anymore, and I had seldom heard or seen much information about it through various media channels, yet my research and writing detailed the expansive global efforts to curtail it. I was surprised to read about TB incidence in developing nations and how the WHO estimates that

it needs billions to significantly reduce the transmission and death rates by 2035. I was similarly surprised to read in that same annual 2024 TB report that the WHO is significantly behind its funding/budgetary targets to reach their ambitious goals, and as it stands, the current rates of global transmission and death rates are significantly below target and are unlikely to reach their targets at the current rates. This reaffirms my goal of getting into health policy, so I can fight for communities, both local and abroad, to receive the help they need to fight whats impacting their communities.

McLean Gaston

This community needs assessment taught me how complex and unequal the various individuals face regarding tuberculosis and drug-resistant tuberculosis. Before tackling this project, I had not known much about TB and believed it to be something that does not affect anyone severely in the United States. Additionally, I had previously thought that there were little to no policies put in place due to the disease's rare nature. My perception of TB and DR-TB dramatically changed when learning about the story of Andrew Speaker and reworking his scenario to low-income individuals in both rural and urban areas. I learned that, within the examined population, mobility, access to proper care, and education all play crucial roles in people’s health outcomes related to the disease.

This assignment also showed me how TB affects individuals worldwide and how the World Health Organization works to improve the state of the disease across all corners of the globe. We examined further how the United States and other countries, such as Mexico, track TB spread among international passengers and implement appropriate protocols. Learning about all

these international protocols, along with national and university protocols, I gained an understanding of all the policies put into place to reduce TB cases in the United States further.

In addition to policy, I further learned the importance of communication between patient and provider. In the case of Andrew Speaker, he was not adequately warned about the severity of his disease and left the country. Within our case study, we examined how communication between patient and provider is a huge limitation in America, especially in rural communities. As a result, we examined various programs that could be implemented to address the issue.