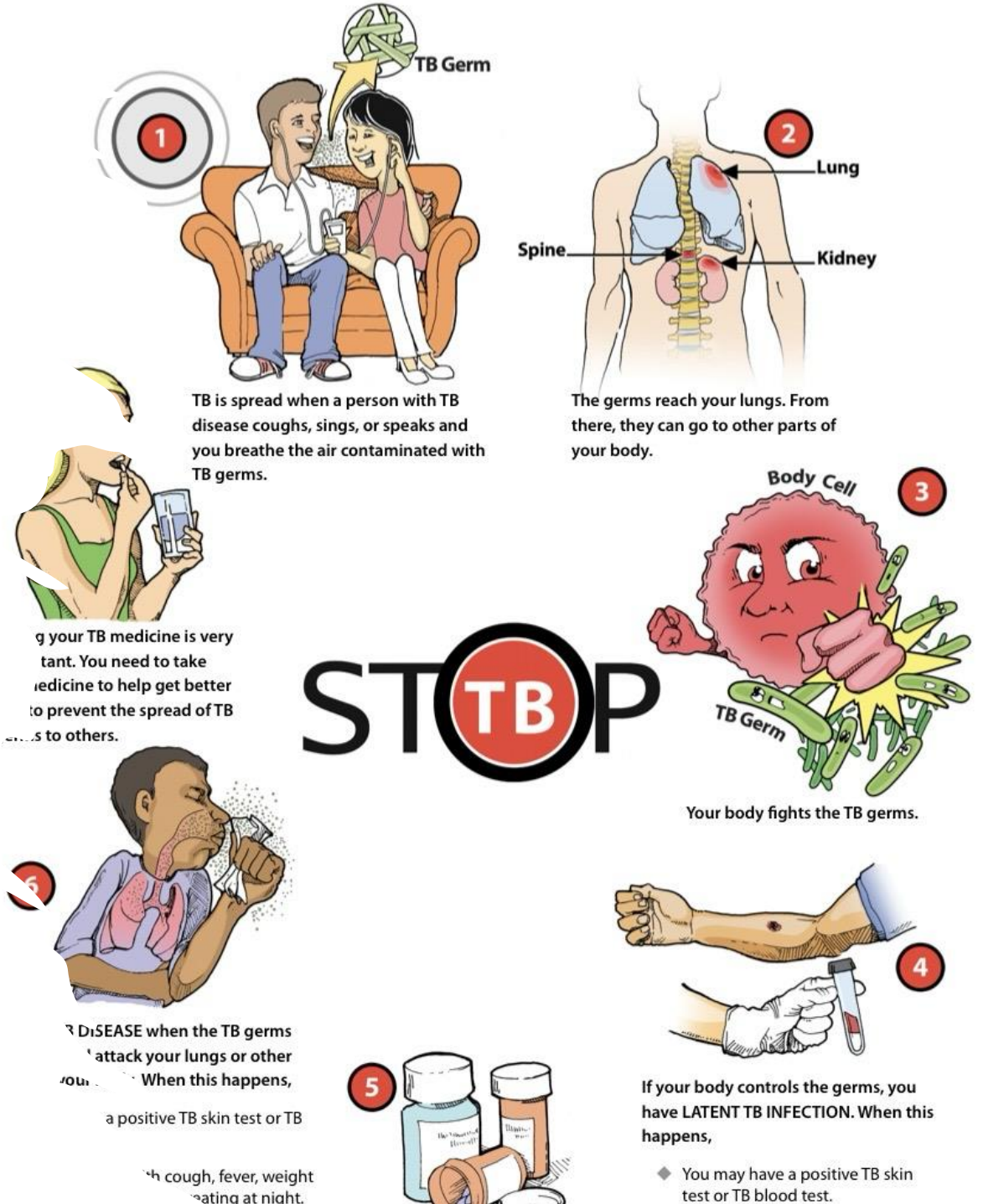
INFC 215 Infection Prevention and Control Reflection #2 Reflecting on the Transmission of Tuberculosis (TB)

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How does understanding the airborne transmission of tuberculosis (TB) influence our approach to patient care and personal protection in medical settings?

As a medical imaging student, learning about the airborne transmission of tuberculosis (TB) has helped me understand the importance of infection prevention in protecting both patients and healthcare workers. Before studying TB, I knew it was a serious disease, but I did not fully appreciate how easily it can spread through tiny airborne particles released when an infected person coughs, sneezes, speaks, or even breathes. This knowledge has made me realize that following infection prevention and control (IPAC) protocols is just as important as performing the imaging procedure itself.

Understanding the airborne transmission of TB directly influences the way I approach patient care and personal protection. Since TB can remain suspended in the air for long periods, healthcare workers must follow airborne precautions whenever TB is suspected or confirmed. This includes wearing a properly fit-tested N95 respirator instead of a regular surgical mask, placing patients in an airborne infection isolation room when appropriate, and limiting unnecessary exposure. During imaging procedures, I would ensure that the patient wears a surgical mask if tolerated while being transported, minimize the time spent in close contact, and follow my facility's infection control guidelines. I now understand that these precautions not only protect me but also help prevent transmission to other patients, coworkers, and visitors.

What are the primary symptoms of TB, and how might these affect a patient's ability to undergo medical imaging procedures?

Knowledge of TB has also helped me recognize how the disease can affect a patient's ability to undergo medical imaging procedures. The primary symptoms of active TB include a persistent cough lasting more than three weeks, coughing up blood or sputum, chest pain, fever, night sweats, fatigue, weight loss, loss of appetite, and weakness. These symptoms may make it difficult for patients to cooperate during imaging examinations. For example, a patient with severe coughing or shortness of breath may have difficulty remaining still or holding their breath for a chest X-ray, which could affect image quality and potentially require repeat exposures. Patients may also become tired easily and require extra assistance or rest during the examination.

This reflection has helped me understand that providing safe patient care goes beyond obtaining diagnostic images. As a future medical radiation technologist, I have a responsibility to recognize the signs and symptoms of infectious diseases, consistently follow airborne precautions, and communicate effectively with the healthcare team. By applying these infection prevention practices, I can help reduce the spread of TB while providing compassionate, respectful, and professional care to every patient.


NIH/NIAID Image of M. tuberculosis