

SECTION 5: Introducing whole genome sequencing

As we discussed a little while ago, not every contact gets infected with the TB bug and not everyone infected gets ill with TB. With the advances in science, we may be able to better identify those patients for whom it is important to perform contact tracing. whole genome sequencing is a new method that rapidly gives information about resistance for all TB drugs, including bedaquiline.



As you can see in this picture, WGS can also make a genetic fingerprint of the tuberculosis bacilli and identify connections between the tuberculosis bacilli of different patients.

By looking closely at the germs from different people, we can see who likely got sick from the same source. This helps us find out if a strain of TB is spreading in one place, like a school or home, or if people got infected somewhere else. If there are communities or places in the community where TB is spreading, which we call hotspots. It also shows which cases are spreading to many other communities.