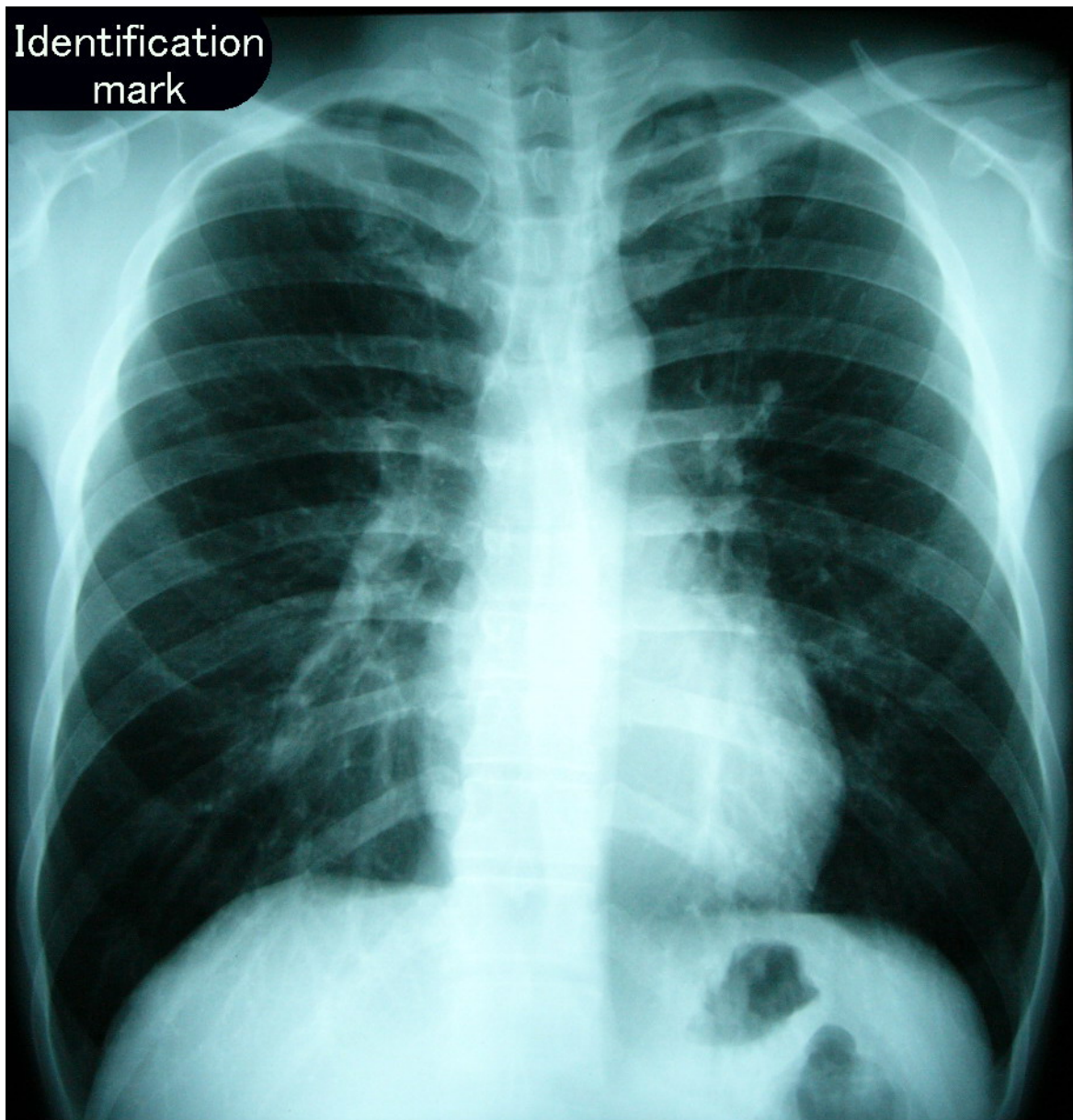


### Good example of chest radiograph

The sample imaging below shows a chest radiograph of excellent quality (Figure 1.2).



*Figure 1.2 Sample chest radiograph taken in the clinic of JATA*

Your ability to recognize and assess the quality of chest radiographies should be improved through having the opportunity to carefully and frequently examine the normal appearance of a good quality chest radiograph. By comparing the normal appearance of a good quality chest radiograph with chest radiographs in the field, you can more easily determine if variations in appearance of these chest radiographs represent acceptable or unacceptable quality. Although clinical diagnosis of TB suspects is usually made by chest physicians, TB supervisors also must acquire the fundamental knowledge regarding factors that affect the quality of chest radiographs. This is because TB supervisors can be the key people to suggest the things that radiographers and chest physicians can do to further improve the quality of chest radiographs in their health facilities.

The areas highlighted in this sample chest radiograph indicate the most important points that we have to pay attention to in order to carefully assess the appearance of a chest radiograph. Comparing the appearances of chest radiographs in the field with a standardized good quality chest radiograph in your mind helps you to decide if the quality is acceptable or not. Accordingly, you have to memorize the standard quality of a chest radiograph by carefully and frequently looking at the normal appearance of good quality chest radiographs. The chest radiograph of good quality usually has the following features;

Check points for anatomical positioning and identification of quality chest radiography:

- Complete identification with name of patient, age, name of health facility, and date of examination
- Clear identification mark printed at the place on the upper-left/right side
- No defective lung fields from apices to lower edges
- Whole edges of the both diaphragms traced
- Sufficient inspiration: the posterior 10<sup>th</sup> rib should be visible above the diaphragm
- Symmetrical location of clavicles and scapulae
- No overlapping of scapulae in the lung fields
- Density of both lung fields visualized symmetrically
- Centrally located trachea and both main tracheal branches visible
- Pulmonary vessels clearly visible in the lung fields and traced to the lung periphery
- Lower vessels in the left lung visible through the heart
- Thoracic vertebrae visible behind the heart
- Artifacts and foreign substances must not be visualized

