

Early Diagnosis NOW POSSIBLE BECAUSE OF 2000 YEARS OF EFFORT AND EXPERIENCE



HIPPOCRATES

400 B.C. The Greek physician, Hippocrates, describes correctly the signs and symptoms of consumption. Modern doctors no longer wait for signs and symptoms to appear before suspecting tuberculosis because usually there are no signs and symptoms when tuberculosis begins.



KOCH

1882 The German physician, Robert Koch, discovers the tuberculosis germ. For 2,000 years doctors had been in the dark as to the cause of this disease, until Koch proved it is caused by germs which can be seen with a microscope. If tuberculosis germs can be seen in your sputum, it means that you are a spreader of the disease.



AUENBRUGGER

1761 An Austrian army physician, Dr. Leopold Auenbrugger, discovers that by gentle tapping with the fingers on the chest sounds are revealed which indicate changes in the lung caused by tuberculosis and other diseases. Napoleon's physician, Dr. Corvissart, made "tapping" (percussion) popular in 1808 and ever since all physicians use it.



PIRQUET

1907 A Viennese children's specialist, Dr. Clemens von Pirquet, observes that the presence of tuberculosis germs hidden in the body can be detected by a skin test known as the tuberculin test. The French physician, Dr. Mantoux, improved Pirquet's method, making the test more reliable. Several million tuberculin tests are now given by physicians each year.



LAENNEC

1819 The French physician, Dr. René Theophile Hyacinthe Laennec, invents the stethoscope, the instrument doctors use for listening to the sounds which air makes when rushing in and out of the lung. The stethoscope is still one of our important diagnostic aids, but physicians today no longer rely on the stethoscope alone in diagnosing early tuberculosis.



ROENTGEN

1895 The German professor of physics, Wilhelm Konrad von Roentgen, discovers the X-ray. No one foresaw the possibility of using this penetrating ray to discover hidden tuberculosis. Twenty years had to pass before X-ray equipment was developed that would enable physicians to photograph the faintest shadows cast by diseased spots in sick lungs. Now the X-ray is our most important diagnostic aid.



PHYSICIANS DEPEND ON THE X-RAY FOR MAKING DIAGNOSIS EARLY

The most important recent discovery is that some people may have tuberculosis that cannot be diagnosed by any other method except by the X-ray. Tuberculosis in its early stages is often without signs and symptoms. "Tapping" and "listening," even the sputum test, may reveal nothing while attempting to discover early tuberculosis. However, a positive tuberculin test means infection and the X-ray may reveal the sick spot in the lung before slowly appearing symptoms such as fatigue, loss of weight, indigestion or a cough arouse any suspicion. The X-ray has become an essential part of a lung examination. **No chest examination for tuberculosis is complete without the X-ray.**



The X-Ray reveals Tuberculosis BEFORE Symptoms appear

EASILY TIRED LOSS OF WEIGHT

INDIGESTION COUGH THAT HANGS ON

Reading X-Ray Films Requires Experience

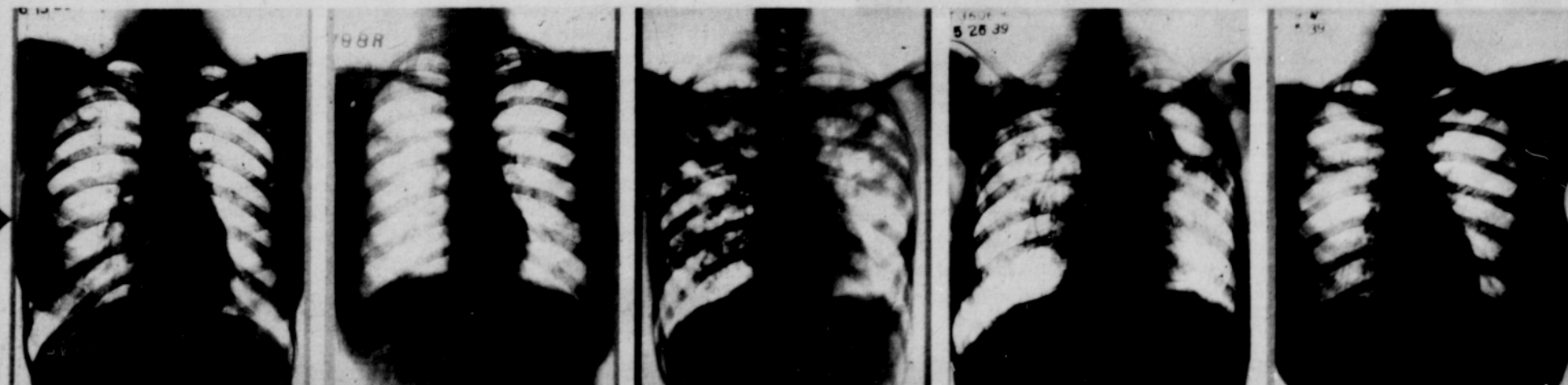
Taking X-ray pictures is easily learned but reading them requires the judgment of an experienced physician. It took many years of research before the meaning of the faint shadows on the X-ray film became fully understood. Now the trained eye can tell from these shadows in what condition the lungs are and where the trouble is located.

The X-Ray Doesn't Cure Tuberculosis

It shows only the extent of the disease. One X-ray picture alone does not show, even to the expert, whether the disease gets worse or better. But a series of X-ray pictures, taken periodically, will disclose whether the disease is making headway, remaining stationary, or whether healing is taking place. A single negative examination gives no assurance that tuberculosis may not develop later.

Not All Tuberculosis is in the Lungs

It may be anywhere, but 9 times out of 10 the lungs are affected. Hence chest X-rays tell the story in most cases. No two cases of tuberculosis are exactly alike. Therefore, each chest X-ray represents its own problem, requiring expert judgment of an experienced physician to interpret it.



Young Mother

Age 19, did not feel sick until a slight hemorrhage occurred. An X-ray of the chest was taken. Tuberculosis was discovered. Treatment was begun at once. The young woman recovered. Many physicians now include the chest X-ray as a routine practice with prenatal examinations. Tuberculosis is often found in young women.

High School Senior

She had a positive tuberculin test. An X-ray of the chest was taken. Early tuberculosis was found. This is a typical example of how searching for tuberculosis among apparently healthy people reveals the disease before symptoms appear. When found in the early stage the disease is usually curable in a short time.

Mill Worker

Age 25. This man felt well but was due to a cough which he thought was due to smoking. X-ray shows advanced tuberculosis in both lungs. His tuberculosis was found by a routine X-ray survey of the employees of the mill where he had worked for many years. He is now in a state tuberculosis sanatorium making a good recovery.

An Old Gentleman

Well-to-do man, age 67. By his own statement was never sick a day in his life. The X-ray shows chronic tuberculosis of many years standing. Sputum full of germs. Tuberculosis was discovered in this man after the tuberculin test had disclosed that his grandchildren had "caught" the germs from someone.

Domestic Helper

Negro woman, age 27. Did not complain of any sickness but had frequent head colds. X-ray shows advanced tuberculosis. This woman was found by tracing the contacts of a tuberculin-positive child. She is now in a county sanatorium, receiving the best of care and making good progress towards recovery.



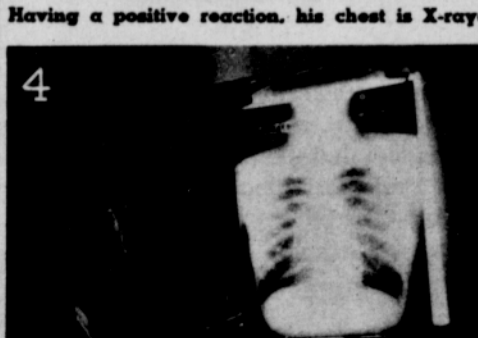
John is on the school team



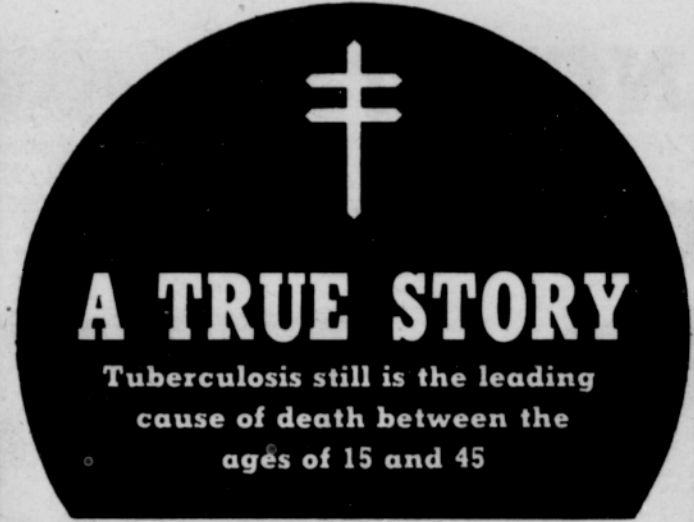
The school offers the tuberculin test



Having a positive reaction, his chest is X-rayed



The shadows of tuberculosis can be seen



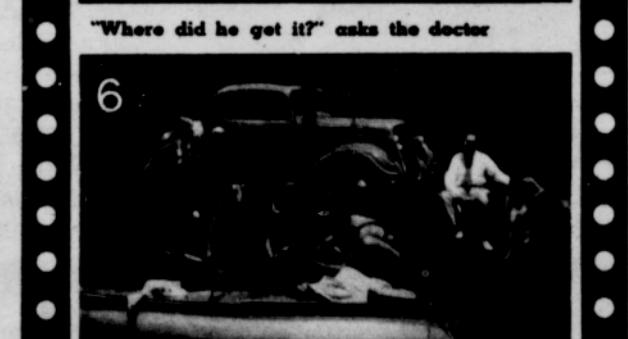
A TRUE STORY

Tuberculosis still is the leading cause of death between the ages of 15 and 45

In thousands of high schools and colleges throughout the country, students are being tuberculin-tested and X-rayed when necessary. Stories like this one happen every day. Modern parents request that their children be tested because the information the test and the X-ray give may help to prevent future disease. Forewarned is forearmed.



"Where did he get it?" asks the doctor



No one in John's family has tuberculosis



But when a child he had a sick aunt



Now John is a patient in a sanatorium



Modern treatment makes him well



John returns to school and is graduated