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**APPLICATION OF CHEST X-RAY IN PULMONOLOGY**

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A chest x-ray is an x-ray of the chest, lungs, heart, large arteries to detect diffrerent pulmonary diseases. Patient has to stand in front of the x-ray machine. You will be told to hold your breath when the x-ray is taken. Two images are usually taken. You will need to stand against the machine, and then sideways.

How to prepare for the test.Tell the health care provider if you are pregnant. Chest x-rays are generally not done during the first 6 months of pregnancy.

How the test will feel.There is no discomfort. The film plate may feel cold. The doctor may order a chest x-ray if you have any of the following symptoms:

* a persistent cough;
* chest injury;
* chest pain;
* coughing up blood;
* difficulty breathing.

It may also be done if you have signs of tuberculisis, lung cancer, or other chest or lung diseases. A serial chest x-ray is one that is repeated. It may be done to look at or monitor changes found on a previous chest x-ray.

Abnormal results may be due to many things, including:

In the lungs: [collapsed lung](http://www.nlm.nih.gov/medlineplus/ency/article/000087.htm), [collection of fluid around the lung](http://www.nlm.nih.gov/medlineplus/ency/article/000086.htm), lung cancer, lung tumor, m[alformation of the blood vessels](http://www.nlm.nih.gov/medlineplus/ency/article/000779.htm), p[neumonia](http://www.nlm.nih.gov/medlineplus/ency/article/000145.htm), scarring of lung tissue, tuberculosis.

Abnormal results may also be due to: a[chalasia](http://www.nlm.nih.gov/medlineplus/ency/article/000267.htm), acute bronchitis, a[lpha-1 antitrypsin deficiency](http://www.nlm.nih.gov/medlineplus/ency/article/000120.htm), a[ortic dissection](http://www.nlm.nih.gov/medlineplus/ency/article/000181.htm), a[telectasis](http://www.nlm.nih.gov/medlineplus/ency/article/000065.htm), a[trial myxoma](http://www.nlm.nih.gov/medlineplus/ency/article/007273.htm), b[lastomycosis](http://www.nlm.nih.gov/medlineplus/ency/article/000102.htm), b[reast cancer](http://www.nlm.nih.gov/medlineplus/ency/article/000913.htm), bronchial adenoma, b[ronchial asthma](http://www.nlm.nih.gov/medlineplus/ency/article/000141.htm), b[ronchiectasis](http://www.nlm.nih.gov/medlineplus/ency/article/000144.htm), [bronchiolitis](http://www.nlm.nih.gov/medlineplus/ency/article/000975.htm), b[ronchopulmonary dysplasia](http://www.nlm.nih.gov/medlineplus/ency/article/001088.htm), b[yssinosis (cotton dust lung disease)](http://www.nlm.nih.gov/medlineplus/ency/article/001089.htm), c[aplan syndrome](http://www.nlm.nih.gov/medlineplus/ency/article/000137.htm), [idiopathic diffuse interstitial pulmonary fibrosis](http://www.nlm.nih.gov/medlineplus/ency/article/000069.htm), [industrial bronchitis](http://www.nlm.nih.gov/medlineplus/ency/article/000072.htm), [Legionnaire’s disease](http://www.nlm.nih.gov/medlineplus/ency/article/000616.htm), malignant hypertension, [myocarditis](http://www.nlm.nih.gov/medlineplus/ency/article/000149.htm), [necrotizing vasculitis](http://www.nlm.nih.gov/medlineplus/ency/article/000432.htm), [neuroblastoma](http://www.nlm.nih.gov/medlineplus/ency/article/001408.htm), [occupational asthma](http://www.nlm.nih.gov/medlineplus/ency/article/000110.htm), [pulmonary tuberculosis](http://www.nlm.nih.gov/medlineplus/ency/article/000077.htm), p[ulmonary veno-occlusive disease](http://www.nlm.nih.gov/medlineplus/ency/article/000075.htm), [Q fever](http://www.nlm.nih.gov/medlineplus/ency/article/000611.htm), r[heumatoid lung disease](http://www.nlm.nih.gov/medlineplus/ency/article/000113.htm), [sarcoidosis](http://www.nlm.nih.gov/medlineplus/ency/article/000076.htm), [senile cardiac amyloid](http://www.nlm.nih.gov/medlineplus/ency/article/000193.htm), [systemic sclerosis (scleroderma)](http://www.nlm.nih.gov/medlineplus/ency/article/000429.htm), [viral pneumonia](http://www.nlm.nih.gov/medlineplus/ency/article/000073.htm), [Wilms tumor](http://www.nlm.nih.gov/medlineplus/ency/article/001575.htm).

Risks. There is low radiation exposure. X-rays are monitored and regulated to provide the minimum amount of radiation exposure needed to produce the image. Most experts feel that the risk is very low compared with the benefits. Pregnant women and children are more sensitive to the risks of x-rays.