

Image Categorization

Instructions ▲

Overview

The purpose of this job is to look at Chest XRAY images for common symptoms of Pneumonia.

Your input will assist a Doctor in determining the presence or absence of Pneumonia in other patients with similar Chest XRAY images!

Steps

1. Confirm the image is a **Chest XRAY**, and of good quality. In a good quality Chest XRAY you will see the outline of the spine in the centre, the ribcage surrounding the organs, and the collar bones at the top.
 2. Focus on the **Lungs** - Do you see opaque or cloudy parts? Note a web like vasculature is OK!
 3. Focus on the **Diaphragm** at the bottom of the lungs - is the diaphragm shadow visible?
 4. Based on your observation of the Lungs and Diaphragm, do you think this image shows the symptoms of Pneumonia?
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Rules Tips

Rules:

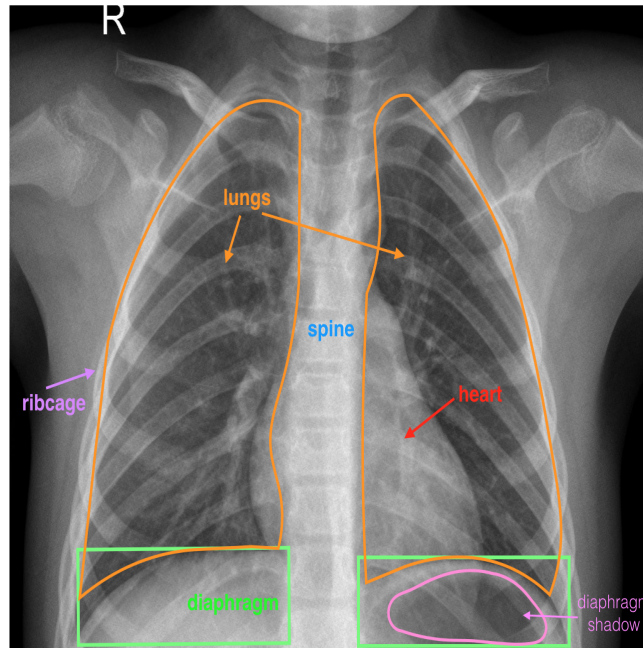
- If in doubt, please indicate it! Most questions offer **Maybe** as an option. It will help us improve our instructions and examples.

- It will also ensure the assistance given to a Doctor is more accurate, and we err on the side of caution.

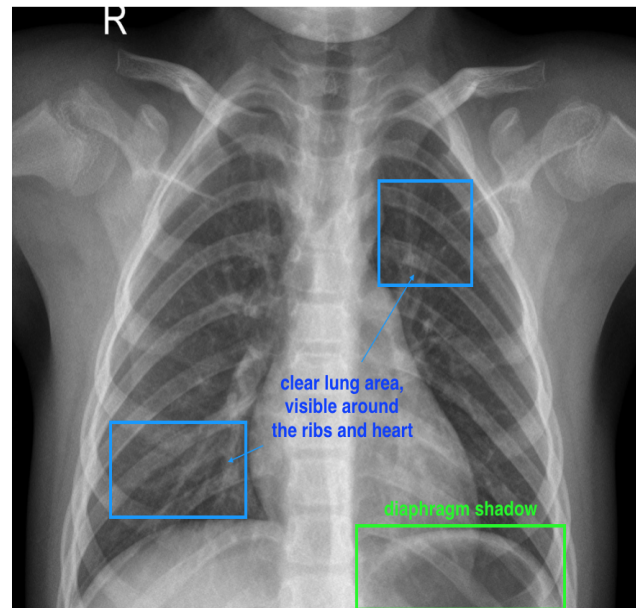
Tips:

- Pneumonia is a disease which makes it harder for your lungs to absorb oxygen from air.
 - The denser an object is, the whiter its appearance on an X-ray (https://www.netdoctor.co.uk/health_advice/examinations/x-ray.htm).
 - The lungs of a healthy person are a honeycomb-like tissue containing a considerable amount of air.
 - Consequently, an X-ray of the lung is dark grey, even black.
 - More solid surrounding tissue, like bone, shows up paler in colour.
 - Abnormal areas within the lung that are more dense than healthy lung tissue will stand out as paler than the surrounding tissue.
 - This is why we look for cloudy or opaque areas in the Chest XRAYs.
 - Please refer the examples for more information.
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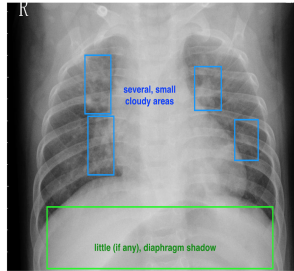
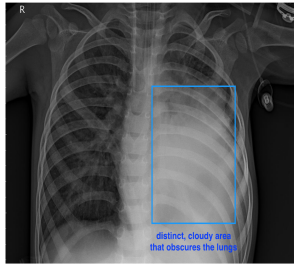
Examples



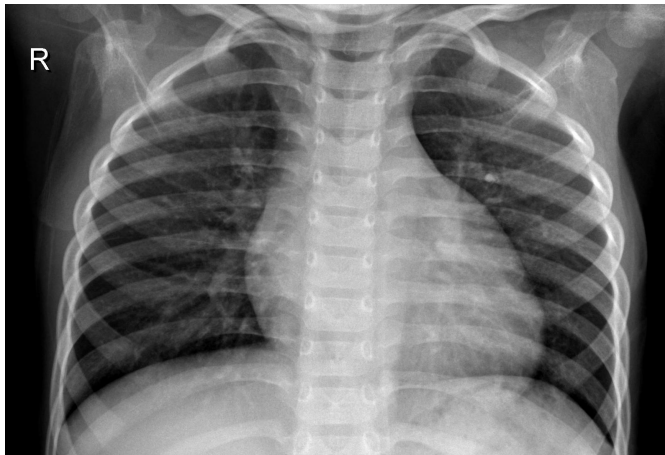
- This shows a good quality Chest XRAY, and labels the parts shown in an Chest XRAY
- Notice the Spine in the centre, the Collar bones at the top and the Ribcage surrounding the organs.
- Notice the position of the two Lungs, and the Heart.
- Notice the location of the Diaphragm at the base of the Lungs, and the Diaphragm shadow.
- You will look for opaque or cloudy areas in the Lungs, and the absence of a Diaphragm shadow in the images you annotate. These are strong symptoms of Pneumonia.
- Even a general opacity obscuring the lungs, heart and diaphragm is a strong symptom of Pneumonia.
- The image shown here is **Healthy**, and has **no symptoms of Pneumonia**



- Another healthy image, showing the lungs clearly visible around the ribs and heart - there is no cloudiness or opacity.
- The diaphragm shadow is also visible.
- The image shown here is **Healthy**, and has **no symptoms of Pneumonia**.
- You can see some vascularity in the lungs - this is normal



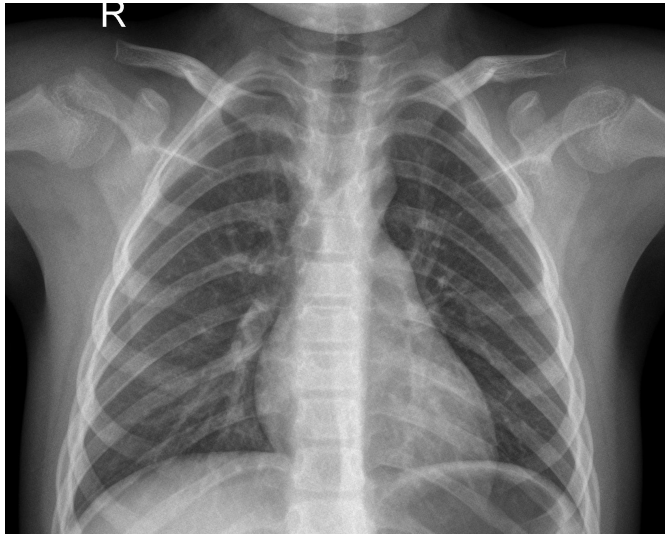
- Both examples are **Unhealthy**, and **show symptoms of Pneumonia**
- In the first image, there is a **big cloudy area** obscuring one of the lungs.
- In the second image, there are **many cloudy areas** in both lungs, and there is **no diaphragm shadow** visible



Is this a chest XRAY image? (required)

- ☐ Yes
- ☐ No

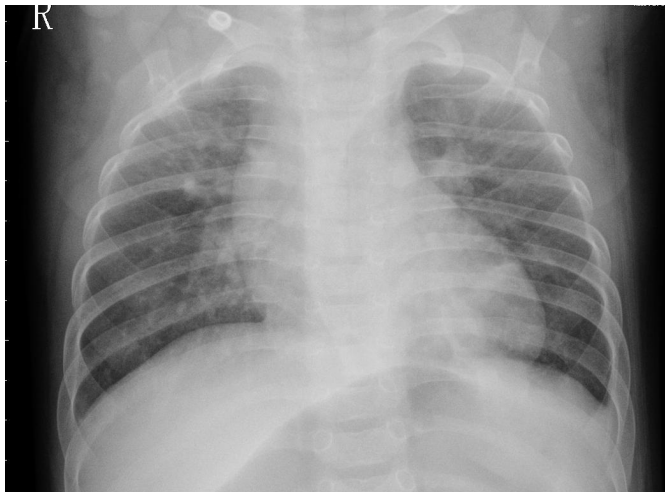
Is the spine visible and in the centre? Do you see the shoulder bones at the top?



Is this a chest XRAY image? (required)

- ☐ Yes
- ☐ No

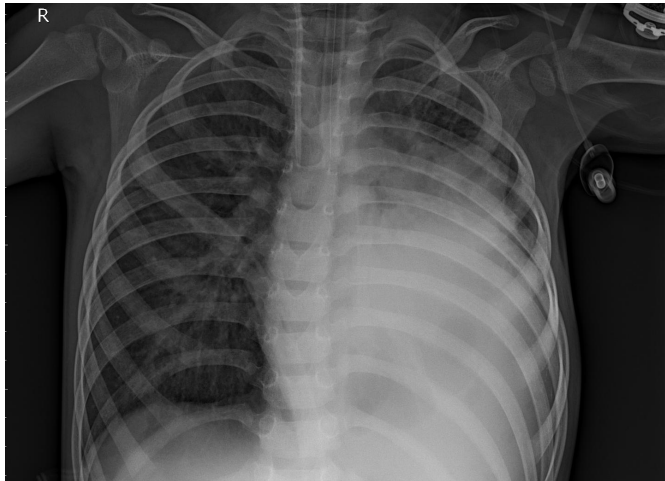
Is the spine visible and in the centre? Do you see the shoulder bones at the top?



Is this a chest XRAY image? (required)

- ☐ Yes
- ☐ No

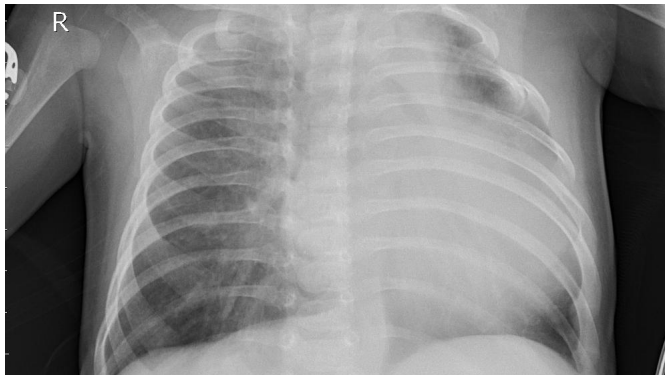
Is the spine visible and in the centre? Do you see the shoulder bones at the top?



Is this a chest XRAY image? (required)

- ☐ Yes
- ☐ No

Is the spine visible and in the centre? Do you see the shoulder bones at the top?



Is this a chest XRAY image? (required)

- ☐ Yes
- ☐ No

Is the spine visible and in the centre? Do you see the shoulder bones at the top?

Test Validators