

# Labelled Dataset To Identity Cases Of Pneumonia In Children

Instructions ▲

## Overview

Help us build a classification system that can identify serious and healthy cases of Pneumonia in children. In this job, you will be presented with different images of chest x-ray in different sizes and taken under different exposure times.

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## Steps

1. Examine the image
  2. Determine if the image has visual symptoms of pneumonia by paying attention to the Lungs and Diaphragm
  3. Check the appropriate box beside the image to indicate healthy chest image or pneumonia image
  4. If other visual symptoms are present in the image that are not on the list/example images, check appropriate option for 'unknown' or 'other' to account for uncertainty
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## Rules & Tips

### Rules:

The images can be classified as normal, pneumonia or unknown (to account for uncertainty)

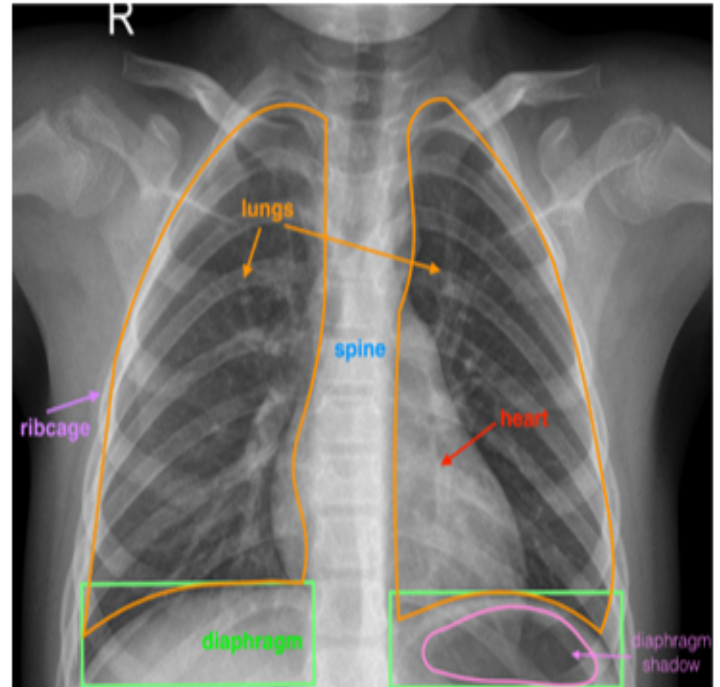
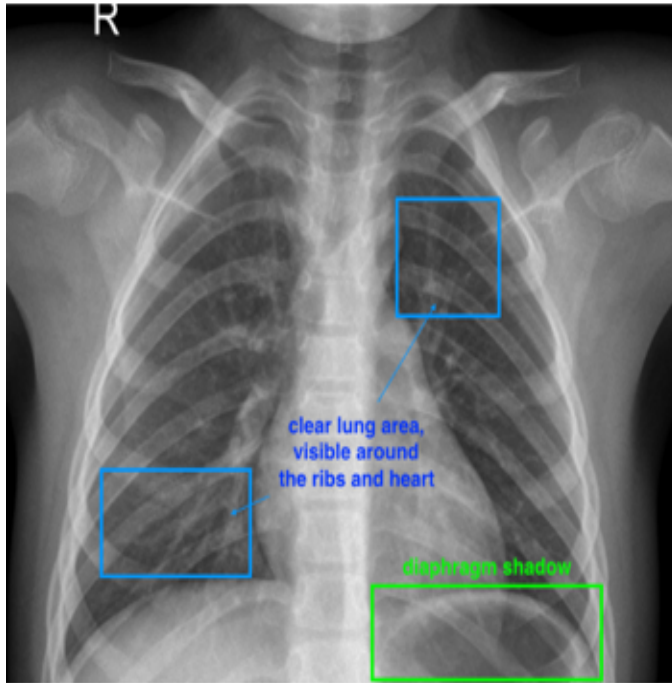
- **Normal** means that the image is a clear, healthy lung without any areas of abnormal cloudiness/opacity.
- **Pneumonia** means that the image has areas of cloudiness/opacity in some areas or one large area.
- **Unknown** means the image does not match any of the 2 visual symptoms listed and cannot be classified.

### Tips:

- Pay close attention to left and right lungs and diaphragm shadow to determine best classification label
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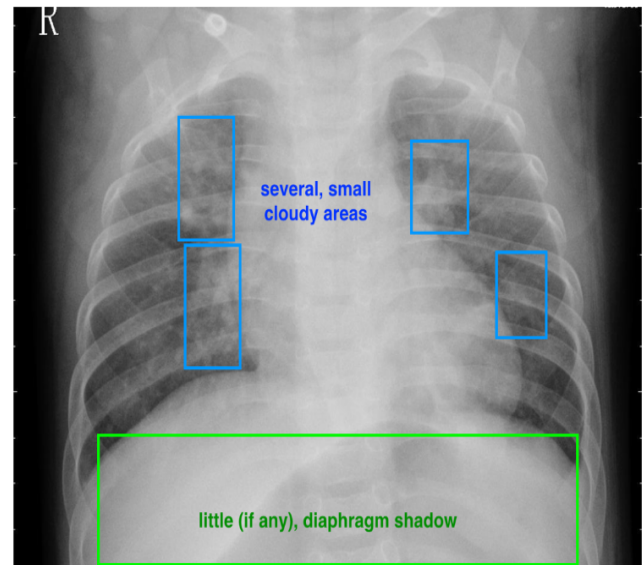
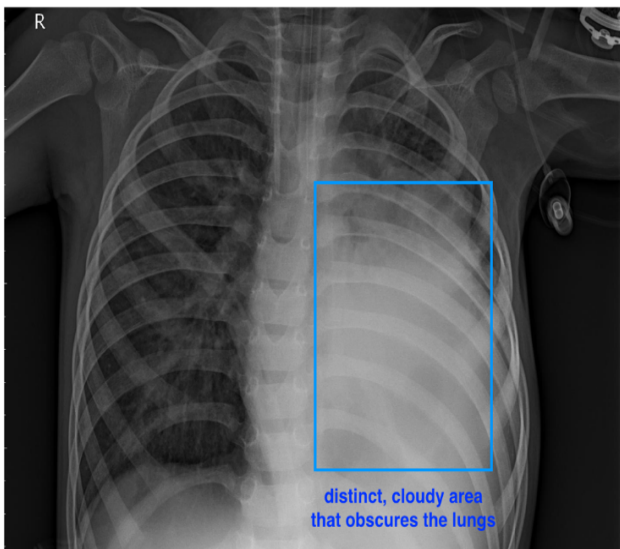
## Example

**Normal:** In the examples below, the image depicts clear, healthy lungs visible around the ribs and heart without any areas of abnormal opacification/cloudiness. There may be structured, web-like vasculature in the lungs but otherwise that area should be clear. The image also shows a diaphragm shadow as labelled



**Pneumonia:** The image in this example shows that the diaphragm shadows are obscured. Also note -

- Left image: concentrated opaque area in the lungs
- Right image: multiple, smaller opaque areas throughout the lung area



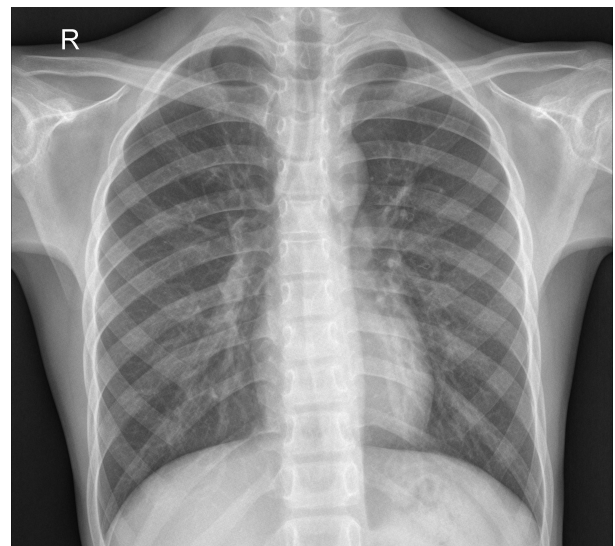
**Unknown:** In this example, the image is nothing compared to the two previous examples (normal and pneumonia) as it shows half of the lungs is totally blocked/opaque, ribs are blurry. Also note that the diaphragm area is also entirely opaque



## Questions

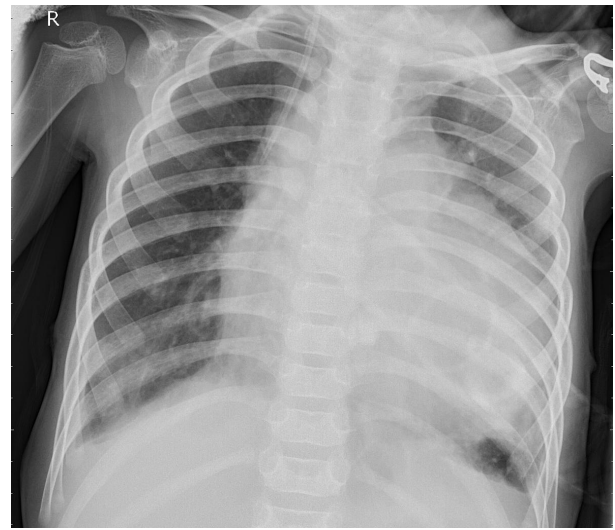
Review the image, paying close attention to visual symptoms in the lungs and diaphragm  
Classify this chest x-ray image

- Normal
- Pneumonia
- Unknown



Review the image, paying close attention to visual symptoms in the lungs and diaphragm  
Classify this chest x-ray image

- Normal
- Pneumonia
- Unknown



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**Classify this chest x-ray image: (required)**

- ☐ Normal
- ☐ Pneumonia
- ☐ Unknown

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**Classify this chest x-ray image: (required)**

- ☐ Normal
- ☐ Pneumonia
- ☐ Unknown

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**Classify this chest x-ray image: (required)**

- ☐ Normal
- ☐ Pneumonia
- ☐ Unknown

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**Classify this chest x-ray image: (required)**

- ☐ Normal
- ☐ Pneumonia
- ☐ Unknown

[https://s3.amazonaws.com/video.udacity-data.com/topher/2019/April/5cad75cb\\_img834-im1002-2747/img834-im1002-2747.jpeg](https://s3.amazonaws.com/video.udacity-data.com/topher/2019/April/5cad75cb_img834-im1002-2747/img834-im1002-2747.jpeg)[https://s3.amazonaws.com/video.udacity-data.com/topher/2019/April/5cad75cb\\_img834-im1002-2747/img834-im1002-2747.jpeg](https://s3.amazonaws.com/video.udacity-data.com/topher/2019/April/5cad75cb_img834-im1002-2747/img834-im1002-2747.jpeg)11

**Classify this chest x-ray image: (required)**

- ☐ Normal
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- ☐ Unknown

Test Validators