

Lung ultrasound

ACQUIRING LUNG ULTRASOUND IMAGES

Advanced lung ultrasound often requires an overall examination of the lungs, rather than a focused test for a single problem such as pneumothorax or pleural effusion.

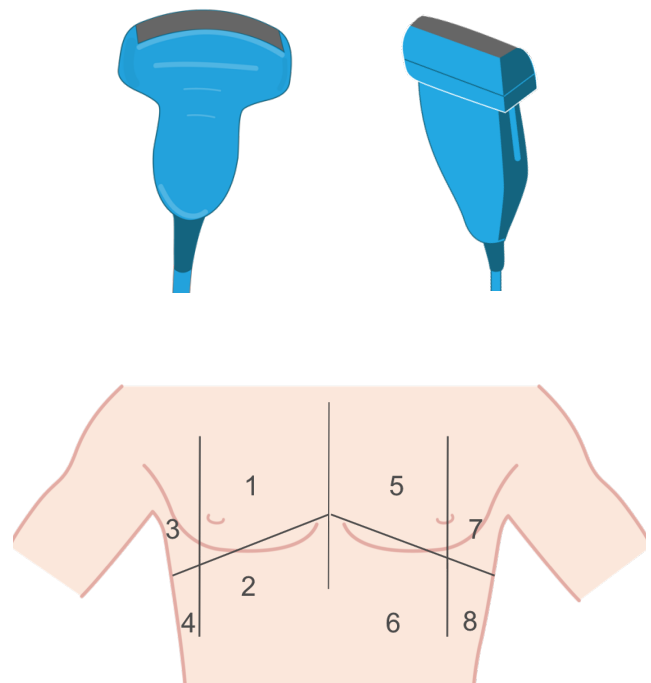
Probe selection

Use the low frequency curvilinear transducer for an initial survey of the lungs. Use the high frequency linear transducer to examine the pleura or in pediatric patients.

Technique

Examine the eight zones of the anterior chest. You will also need to examine the posterior lung to complete a full evaluation for pneumonia and other pleural abnormalities.

With the transducer in a vertical orientation, use a mow the lawn approach to ensure you are thorough.



A good general approach includes:

1. Start deep

Acquire initial images with the curvilinear transducer. Set your depth sufficiently deep (> 10 cm) that you can appreciate sonographic B lines, if present, and that you have an overview of anatomic relationships.

2. Adjust depth

This allows you to confirm and refine your initial findings. If you see superficial abnormalities at the level of the pleura, reduce your depth to better appreciate their characteristics. If you see potential sonographic B lines, increase depth to at least 18 cm to ensure they meet B line criteria.

3. Switch probes

Changing to the linear transducer can allow you to examine pleural-based abnormalities with greater resolution.