

## Lung ultrasound

# MOVING BEYOND THE BASICS OF LUNG ULTRASOUND

### Core ultrasound applications

Core applications for lung ultrasound include these evaluations

- pneumothorax
- pleural effusion
- sonographic B lines

In these cases, we are using ultrasound to address a question with a yes or no answer. It is best used in patients in which you have a specific clinical question to test for.

### Advanced lung ultrasound

Advanced lung ultrasound can take a more general approach, and be applied to any patient with dyspnea. It has the greatest value in patients with abnormal vital signs or critical illness and shock.

Advanced lung ultrasound allows us to diagnose more entities



Pneumonia



Viral respiratory  
infections



Interstitial  
lung disease



Acute respiratory  
distress syndrome  
(ARDS)



Traumatic  
pulmonary  
contusions

Advanced lung ultrasound does not use a yes or no approach to establishing a diagnosis. Many lung ultrasound findings can overlap and look similar, despite a very different underlying disease.

Successful use of lung ultrasound requires a user to consider

- Presence of findings
- Distribution of findings
- Pre-test probability for a given disease

When performing advanced lung ultrasound, a thorough examination of both lungs, including the posterior aspect of the chest, is often required. This is a region not typically included in basic lung ultrasound.