

301 Acute Respiratory Distress Syndrome

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Acute respiratory distress syndrome (ARDS) is a clinical syndrome of severe dyspnea of rapid onset, hypoxemia, and diffuse pulmonary infiltrates leading to respiratory failure. ARDS can be caused by diffuse lung injury from many underlying medical and surgical disorders. The lung injury may be direct, as occurs in toxic inhalation, or indirect, as occurs in sepsis ([Table 301-1](#)). The clinical features of ARDS are listed in [Table 301-2](#). By expert consensus, ARDS is defined by three categories based on the degrees of hypoxemia ([Table 301-2](#)). These stages of mild, moderate, and severe ARDS are associated with mortality risk and with the duration of mechanical ventilation in survivors.

TABLE 301-1 Clinical Disorders Commonly Associated with ARDS

DIRECT LUNG INJURY	INDIRECT LUNG INJURY
Pneumonia	Sepsis
Aspiration of gastric contents	Severe trauma
Pulmonary contusion	Multiple bone fractures
Near-drowning	Flail chest
Toxic inhalation injury	Head trauma
	Burns
	Multiple transfusions
	Drug overdose
	Pancreatitis
	Postcardiopulmonary bypass

TABLE 301-2 Diagnostic Criteria for ARDS