

PARAMETER	TYPE OF DISEASE		
	INVASIVE	CHRONIC	ALLERGIC
Incidence/100,000 ^a	0.6–16	~10.4	? ^b
Prevalence/100,000 ^a	—	1.4–126	286 ^c
Global burden ^a	~850,000	~3,000,000	~10,000,000
Mortality rate without treatment	~100%	~50%	<1%
Respiratory Diagnostic Sensitivity^d			
Culture ^e	✓	✓-✓✓ ^e	✓-✓✓ ^e
Microscopy	✓	✓	?
Antigen	✓✓✓	✓✓	✓✓✓
Real-time PCR	✓✓	✓✓	✓✓
Blood Diagnostic Sensitivity^d			
Culture	×	×	×
Antigen	✓✓	✓	×
β-D-Glucan	✓✓	✓	?
Real-time PCR	✓✓	×	×
IgG antibody	✓	✓✓✓	✓✓✓
IgE antibody	×	✓✓	✓✓✓✓

^a<http://www.gaffi.org/roadmap/>. ^bAllergic fungal disease can develop at any age, usually in adulthood; the annual frequency with which it occurs is not known. ^cAllergic bronchopulmonary aspergillosis and severe asthma with fungal sensitization. ^dKey for sensitivity: 1 check = limited (as the text indicates, 10–30% for culture); 2 checks = higher; 3 checks = >80%; and 4 checks = ~95%. ^eHigh-volume fungal culture increases sensitivity to the same level as PCR.

Abbreviation: PCR, polymerase chain reaction.

■ RISK FACTORS AND PATHOGENESIS

The primary risk factors for invasive aspergillosis are profound neutropenia, glucocorticoid use, and underlying respiratory disease; risk increases with longer duration of these conditions. Higher doses of glucocorticoids increase the risk of both acquisition of invasive aspergillosis and death from the infection. Neutrophil and/or phagocyte dysfunction also is an important risk factor, as evidenced by aspergillosis in CGD, advanced HIV infection, and relapsed leukemia. Invasive aspergillosis is increasingly recognized (if actively