participated in the preparation of the guidelines and approved the final recommendations. Feedback was obtained from external peer reviewers. The Pediatric Infectious Diseases Society, the Society for Healthcare Epidemiology of America, and the American College of Obstetricians and Gynecologists reviewed and endorsed the guideline. The IDSA SPGC and the IDSA Board of Directors reviewed and approved the guidelines prior to dissemination.

### Revision Dates

At annual intervals, the SPGC will determine the need for revisions to the guideline based on an examination of current literature evidence and the likelihood that any new data will have an impact on the recommendations. If necessary, the entire expert panel will be reconvened to discuss potential changes. Any revision to the guideline will be submitted for review and approval to the IDSA SPGC and Board of Directors.

## BACKGROUND

### Definitions

"Influenza season" refers to the surveillance period when influenza activity typically occurs, such as during October through May, in the United States. "Influenza activity" is defined as the circulation of seasonal influenza A and B viruses among persons in the local community. "High influenza activity" is defined as increased circulation of seasonal influenza A and B viruses, such as peak weeks of circulation of seasonal influenza A and B viruses during the colder fall, winter, and spring months in the United States. "Low influenza activity" is defined as low or lack of circulation of seasonal influenza A and B viruses, such as during the warm summer months in the United States. "Acute respiratory illness" is defined as infection of either the upper or lower respiratory tract with respiratory symptoms, with or without fever. "Influenza-like illness" (ILI) is defined as acute respiratory illness with fever and either cough or sore throat. "Influenza" refers to symptomatic illness caused by seasonal influenza A or B virus infection. "Respiratory distress" is defined as difficulty in breathing that is usually associated with an increased respiratory rate and use of accessory muscles of breathing. "Laboratory-confirmed influenza" is defined as acute respiratory illness with laboratory testing evidence of influenza virus infection.

### Scope

The scope of the guidelines pertains to diagnostic testing and treatment of illness caused by infection with influenza A and B viruses circulating among humans during seasonal epidemics and does not address asymptomatic infections. The guidelines also address diagnostic testing and use of antivirals for management of institutional influenza outbreaks. Background information about signs and symptoms of influenza, complications, groups considered to be at high risk of complications, and influenza tests are included in the next section. The guidelines do not address sporadic infections with influenza C virus, and do not address sporadic human infections with novel influenza A viruses of animal origin.

#### *Seasonal Influenza Background Information*

Influenza is caused by infection of the respiratory tract with influenza A, B, or C viruses. Seasonal epidemics of influenza A and B viruses occur each fall, winter, and spring in the United States, while influenza C virus infections occur sporadically. Seasonal influenza A or B virus infections can cause a wide range of manifestations, from asymptomatic infection, uncomplicated illness with or without fever (Table 2), to complications that may result in severe disease (Table 3). One study estimated that during 2010–2016, the seasonal incidence of symptomatic influenza among all ages in the United States was approximately 8% and varied from 3% to 11% [1]. Most people recover from influenza without sequelae, but some persons are considered to be at increased risk for severe and fatal influenza, including children aged <5 years (but especially <2 years), adults aged ≥65 years, pregnant and postpartum women, people with certain chronic medical conditions including pulmonary, cardiac, and metabolic disease, people with immunosuppression, people with extreme obesity, residents of nursing homes, and American Indians and Alaska Natives [2–8] (Table 4). Elderly persons have the highest mortality rates attributable to influenza [8]. Among the high-risk groups, persons considered to be at very high risk of complications from influenza include those who are severely immunocompromised (eg, hematopoietic stem cell transplant [HSCT] recipients).

During the 2010–2016 influenza seasons, seasonal influenza epidemics were associated with an estimated 4.3–16.7 million medical visits, 140 000–710 000 hospitalizations, and 12 000–56 000 respiratory and circulatory deaths each year in the United States [9]. A recent modeling study estimated a range of 291 243–645 832 seasonal influenza–associated respiratory deaths occurring annually worldwide [10]. Substantial practice variation exists in the diagnosis and treatment of influenza [21–23]. Appropriate diagnosis of influenza and timely use of antiviral medications may decrease unnecessary testing for other etiologies and associated empiric antibiotic use [11, 12], duration of symptoms, hospitalization, the need for critical care, and mortality [13–16].

Influenza vaccine effectiveness varies by age, host immune status, and the match between circulating and vaccine virus strains [24]. Because influenza vaccine effectiveness is widely variable, ranging from very low to approximately 40%–60% in well-matched seasons (https://www.cdc.gov/flu/professionals/vaccination/effectiveness-studies.htm) [25], a history of current season influenza vaccination does not exclude a diagnosis of influenza.

Typical signs and symptoms of uncomplicated influenza are listed in Table 2. However, atypical presentations of influenza virus infection, with or without fever, should also be considered