Statement of David D. Chaplin, M.D., Ph.D., Chair of the Committee on Public Affairs of The American Association of Immunologists (AAI), Regarding the Importance of Vaccines
March 5, 2019

Each year, seasonal outbreaks of influenza cause an estimated 9.3 million to 49 million illnesses, 140,000 to 960,000 hospitalizations, and 12,000 to 79,000 deaths in the United States.1 Other serious infectious diseases also cause occasional outbreaks, often with devastating consequences. A growing outbreak of measles – a dangerous, highly contagious, and potentially lethal disease – is currently spreading in 10 states. It is easily transmitted through the air by coughing and sneezing and by contact with contaminated surfaces. There is no anti-viral treatment for measles. Children younger than five and adults over 20 are at the highest risk of serious complications, including blindness, swelling of the brain, and severe pneumonia.2 Those with compromised immune systems or underlying health conditions who cannot get vaccinated are also at significant risk of complications and death.

The spread of many diseases can be limited, or prevented, by available vaccines. For example, efficacy of the existing measles vaccine [measles, mumps, rubella, or “MMR”] is about 97%,3 and its widespread use could prevent measles entirely.4 In other instances, such as with the influenza vaccine, immunization can also lessen the severity of disease, reducing the number of hospitalizations and saving lives.5

AAI is concerned that some parents are choosing not to have their children vaccinated; among the reasons cited is their uncertainty about vaccine safety. AAI strongly believes that FDA-approved vaccines are safe and effective,6 and encourages concerned parents to consult with their doctors and review data from the Centers for Disease Control and Prevention regarding vaccine safety.7 Internet reports that continue to spread discredited theories, including those linking vaccines to autism,8 are doing a tremendous disservice to parents, their children, and our communities.9

AAI believes that currently approved vaccines are safe, effective, and extremely important tools for safeguarding the health of the public, and urges all who are medically able to be vaccinated according to recommended schedules.10

1 https://www.cdc.gov/flu/about/disease/burden.htm. The best way for people to reduce their risk of getting sick is to receive an annual flu vaccine, which is recommended for almost everyone 6 months of age and older. (https://www.cdc.gov/flu/protect/keyfacts.htm) It is particularly important for children, since about 80% of children who die from flu-associated causes were not vaccinated. (https://www.cdc.gov/flu/about/disease/us_flu-related_deaths.htm)
2 https://www.cdc.gov/measles/about/complications.html
3 https://www.cdc.gov/measles/vaccination.html
4 For instance, a child with an NME [nonmedical exemption] from the measles, mumps, and rubella (MMR) vaccine is 35 times more likely to contract measles than is a vaccinated child
5 https://www.cdc.gov/flu/about/qa/vaccineeffect.htm
6 https://www.fda.gov/biologicsbloodvaccines/vaccines/approvedproducts/ucm093833.htm
7 https://www.cdc.gov/vaccinesafety/index.html
9 AAI cautions that there have been reports of unscrupulous medical professionals profiting from fearful parents seeking written exemptions to school vaccine requirements. See https://health.usnews.com/health-care/articles/2018-10-29/in-california-some-doctors-sell-medical-exemptions-for-kids-vaccinations
10 https://www.cdc.gov/vaccines/schedules/index.html