

RSV vaccines indicator

Burden & epidemiology

Number of new cases per year (last 3-5 years)

In 2019, about 33 million episodes of RSV-induced acute lower respiratory infections (ALRI) occurred in children under 5 years of age. 1 in 5 episodes occurs in children aged 0 -6 months. 1

Proportion of the population affected by the disease or infected with the antigen

By the age of 2 almost all children will have been infected with RSV, with approximately 1/4-1/3 developing lower respiratory tract disease; RSV infections recur throughout life but disease severity is lower in older children and healthy young adults, and begins to rise again among elderly persons (e.g., over 65 years of age). 2, 3

Serogroup or serotype distribution (for serogroup- or serotype-specific vaccines)

RSV strains are grouped within a single serotype but are separated into 2 subgroups: RSV-A and RSV-B and both can cause severe disease. Both subgroups co-circulate during the RSV season, however the dominating subgroup is unpredictable and variable in annual outbreaks. 4, 5

Number of deaths from the disease per year

In young children an estimated 101,400 deaths occur annually, 45,700 in infants under 6 months with 97% of these deaths occurring in LMICs. Furthermore <200,000 RSV-related deaths are estimated to occur in other age groups, mostly the elderly. 6, 7

Case Fatality ratio (number of deaths / number of new cases, in %)

In-hospital CFR for children aged 0 to 60 months: 0.1 % in HICs, 0.6 %–0.8 % in LMICs, and 1.4 % in LICs. However, community mortality studies show a high and unmeasured burden of RSV deaths in children in LMICs e.g. 4 deaths occur in the community for every 1 in-hospital death in LMICs. 8

Outbreak, epidemic or pandemic risk

Seasonal epidemics occur every year in the general population in most locations globally. Nosocomial outbreaks have been reported in several health care settings, including pediatric/neonatal intensive care units, adult stem cell transplant units, and adult hematology/oncology units in LMICS. RSV outbreaks have also been reported in older adults in long-term care facilities. RSV is not a virus of pandemic potential. 3

Contribution of the vaccine to achievement of the national, regional or global disease goals

Currently there is no global or regional elimination goal.

Sources

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