## THE VALUE OF SOCIETY-WIDE VACCINATIONS

"The vaccination of a fraction of a population reduces the number of those susceptible to infection within the population and, thus, the probability of infection that can result in disease is also reduced."

This indirect impact is increasingly important given today's globalization and cross-border population movements.

## THE VALUE OF INDIRECT PROTECTION WITHIN FAMILIES AND SOCIETY

- Vaccination has a large impact on whole families. The vaccination of children reduces transmission to parents and older grandparents who are more susceptible to infectious diseases.
  - A study in the UK showed that "in 42% of families, 9-month-old children were looked after by grandparents when parents were at work, illustrating the importance of healthy grandparents."
- The role of this indirect protection extends across society, especially to population groups who cannot be vaccinated including newborn infants, pregnant women, and immunocompromised individuals.

## THE VALUE OF SOCIETAL AND CAREGIVER BURDEN DUE TO INFECTIOUS DISEASE

- The cost of disease extends past the family and also falls on caregivers, communities, and the larger society. Thus, vaccines have enhanced value when we consider the costs of absenteeism and loss of productivity without them.
  - For example, "in Germany, the total annual costs of varicella for payers
    was estimated to be €78 million, the largest portion of which was due to
    the significant work loss costs incurred by parents caring for their sick
    children. For the society, the total annual costs were estimated to be
    €187.5 million, 82% of which corresponded to indirect costs."

## THE VALUE OF MINIMIZING ABSENTEEISM AND IMPROVING ECONOMIC PRODUCTIVITY THROUGH VACCINATION

- Across society, vaccinations minimize workforce absenteeism and the loss
  of productivity due to infection. Particularly for healthcare workers, data
  shows that vaccines significantly improve the productivity of healthcare
  systems, where absenteeism impacts the quality of care and resource
  management.
  - Research shows that "even a 1% decrease in absenteeism of healthcare workers could lead to savings of around £34.2 million for the National Health Service in the UK."