

There was a significant decrease of incidence of pertussis after the routine vaccination by whole cell vaccine in 1958 in Czech Republic. Since the 90's an upward trend of incidence has been observed in the Czech Republic again. There was an age shift from the group of youngest children toward older children, adolescents and adults. The highest increase in pertussis cases occurred in 10-14 year-olds. This age shift of pertussis incidence conducted to introduction of new revaccination programme for children in the age of 10 - 11 years by booster dose.

The question is if this change of the vaccination schedule is enough or if it's convenient to administer the sixth dose of vaccine in the age of 9 year.

Despite high pertussis vaccine coverage in many other developed countries a similar upward trend of incidence, especially in older children and adults, has been observed. Infants are at greatest risk of death or severe complication of pertussis. Older children, adults and vaccinated population have often mild or atypical, misdiagnosed forms of pertussis and might represent a significant source of infection for non-immune infants.

Target vaccination of parents, grandparents and a specific group of population in a close contact with non-immune child (health workers, educationists) should be also considered.

Further important thing is to achieve an complete surveillance (precise case definition, better diagnosis and proper reporting).