



## Vaccines effective for prevention of rotavirus diarrhoea

### Clinical question

How effective are vaccines for preventing rotavirus diarrhoea?

### Bottom line

Compared with placebo, Rotarix (given between 1 and 3 months of age) reduced cases of rotavirus diarrhoea by 83% in the first year and 52% in the second year. It also reduced hospitalisations by 81% after 1 year and 84% at 2 years. Compared with placebo, RotaTeq (given between 1 and 6 months of age) reduced cases of rotavirus diarrhoea by 73% after 1 year and 62% during the 2nd year. It also reduced hospitalisations by 96% after 1 year. The vaccines tested against placebo gave a similar number of adverse events such as deaths, reaction to the vaccine, and others that required discontinuation of the vaccination schedule.

### Caveat

All the included trials were placebo controlled, which means there are no data directly comparing Rotarix and RotaTeq. The trials provided only limited data for special groups of children, such as preterm infants and malnourished children.

### Context

Rotavirus infections cause over half a million deaths per year in children younger than 5 years, especially in low-income and middle-income countries. Since 2009, the World Health Organization has recommended rotavirus vaccination be included in national immunisation programmes, especially in countries with a high burden of diarrhoeal deaths in children younger than 5 years.

### Cochrane Systematic Review

Soares-Weiser K et al. Vaccines for preventing rotavirus diarrhoea: vaccines in use. *Cochrane Reviews*, 2010, Issue 5. Article No. CD008521. DOI: 10.1002/14651858.CD008521.

*This review contains 34 trials involving 175,944 participants.*

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