

Combined MMR vaccine – rubella

Numbers for people who either received the full MMR vaccination series in childhood or not, if exposed to the rubella virus later in life.

	10,000 people without vaccination exposed to the rubella virus	10,000 people with vaccination exposed to the rubella virus
Benefits*/**		
How many people contract rubella?	4,000-9,000	40-270
How many embryos are harmed by rubella up to the 11th week of pregnancy?	1,000-5,850	10-176
How many unborn children are harmed by rubella between the 12th and 18th week of pregnancy?	320-1,800	3-54
Harms***		
How many children suffer from a low platelet count (thrombocytopenia) due to the vaccination?	–	0-1
How many children suffer from febrile seizures due to the vaccination?	–	2-16

*The combined MMR vaccination also protects against measles and mumps. **Numbers given under benefits are based on model calculations. ***Redness, pain, or swelling at the injection site are possible.

Short summary: A vaccination may protect against rubella in case of exposure to the virus. Redness, swelling, or pain at the injection site are possible; however, severe reactions to the vaccination are very rare.

Sources: [1] Demicheli et al. *Cochrane Database Syst Rev* 2012;2:CD004407. [2] Doerr & Gerlich. *Medizinische Virologie: Grundlagen, Diagnostik, Prävention & Therapie viraler Erkrankungen*. Thieme 2010. [3] Plotkin et al. *Vaccines*. 6 ed: Saunders 2012. [4] RKI. *RKI-Ratgeber für Ärzte: Röteln*. 2010. [5] Wichmann & Ultsch. *Bundesgesundheitsbl Gesundheitsforsch Gesundheitssch* 2013;56(9):1260-9. [6] Friese et al. (ed.). *Infektionserkrankungen der Schwangeren und des Neugeborenen*. Springer 2013. [7] Quast & Stück. *DGK. Ärzte Merkblatt* 2002. [8] Black et al. *BJCP* 2003; 55(1):107-11. [9] Patja et al. *Pediatrics* 2001;107(2):e27. [10] Vestergaard et al. *JAMA* 2004;292(3):351-7. [11] Wilson et al. *PLoS One* 2011;6(12):e27897.