

Recommended intervals between administration of antibody-containing products and measles- or varicella-containing vaccine, by product and indication for vaccination

| Product/Indication | Dose (mg IgG/kg) and route ^(a) | Recommended interval before measles- or live varicella-containing vaccine ^(b) administration |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Blood transfusion—RBCs, washed | 10 mL/kg, negligible IgG/kg IV | None |
| Blood transfusion—RBCs, adenine-saline added | 10 mL/kg (10 mg IgG/kg) IV | 3 months |
| Blood transfusion—Packed RBCs (hematocrit 65%) ^(c) | 10 mL/kg (60 mg IgG/kg) IV | 6 months |
| Blood transfusion—Whole blood (hematocrit 35%-50%) ^(c) | 10 mL/kg (80-100 mg IgG/kg) IV | 6 months |
| Blood transfusion—Plasma/platelet products | 10 mL/kg (160 mg IgG/kg) IV | 7 months |
| Botulinum Immune Globulin Intravenous (Human) | 1.0 mL/kg (50 mg IgG/kg) IV | 6 months |
| Cytomegalovirus IGIV | 150 mg/kg maximum | 6 months |
| Hepatitis A IG—Contact prophylaxis | 0.1 mL/kg (16.5 mg IgG/kg) IM | 6 months ^(d) |
| Hepatitis A IG—International travel, <1 month stay | 0.1 mL/kg (16.5 mg IgG/kg) IM | 6 months ^(d) |
| Hepatitis A IG—International travel, ≥1 month stay | 0.2 mL/kg (33 mg IgG/kg) IM | 6 months ^(d) |
| Hepatitis B IG | 0.06 mL/kg (10 mg IgG/kg) IM | 3 months |
| IGIV—Replacement therapy for immune deficiencies ^(e) | 300-400 mg/kg IV | 8 months |
| IGIV—Immune thrombocytopenic purpura treatment | 400 mg/kg IV | 8 months |
| IGIV—Postexposure varicella prophylaxis | 400 mg/kg IV | 8 months |
| IGIV—Postexposure measles prophylaxis for immunocompromised contacts | 400 mg/kg IV | 8 months |
| IGIV—Immune thrombocytopenic purpura treatment | 1000 mg/kg IV | 10 months |
| IGIV—Kawasaki disease | 2 g/kg IV | 11 months |
| Measles prophylaxis IG—Standard (i.e., nonimmunocompromised) contact | 0.50 mL/kg (80 mg IgG/kg) IM | 6 months |
| Monoclonal antibody to respiratory syncytial virus F protein (e.g., Synagis [MedImmune]) ^(f) | 15 mg/kg IM | None |
| Rabies IG | 20 IU/kg (22 mg IgG/kg) IM | 4 months |
| Tetanus IG | 250 units (10 mg IgG/kg) IM | 3 months |
| Varicella IG | 125 units/10 kg (60-200 mg IgG/kg) IM, maximum 625 units | 5 months |

Abbreviations: HIV = human immunodeficiency virus; IG = immune globulin; IgG = immune globulin G; IGIV = intravenous immune globulin; mg IgG/kg = milligrams of immune globulin G per kilogram of body weight; IM = intramuscular; IV = intravenous; RBCs = red blood cells.

^(a) This table is not intended for determining the correct indications and dosages for using antibody-containing products. Unvaccinated persons might not be protected fully against measles during the entire recommended interval, and additional doses of IG or measles vaccine might be indicated after measles exposure. Concentrations of measles antibody in an IG preparation can vary by manufacturer's lot. Rates of antibody clearance after receipt of an IG preparation also might vary. Recommended intervals are extrapolated from an estimated half-life of 30 days for passively acquired antibody and an observed interference with the immune response to measles vaccine for 5 months after a dose of 80 mg IgG/kg. Sources: Mason W, Takahashi M, Schneider T. Persisting passively acquired measles antibody following gamma globulin therapy for Kawasaki disease and response to live virus vaccination [Abstract 311]. Presented at the 32 meeting of the Interscience Conference on Antimicrobial Agents and Chemotherapy, Los Angeles, California, October, 1992, AND Siber GR, Werner BG, Halsey NA, et al. Interference of immune globulin with measles and rubella immunization. *J Pediatr.* 1993;122(2):204-211. DOI: 10.1016/S0022-3476(06)80114-9, AND Mason WH, Schneider TL, Takahashi M. Duration of passively acquired measles antibody and response to live virus vaccination allowing gamma globulin therapy for Kawasaki syndrome. *Prog Pediatr Cardiol.* 1992;1(1):82. DOI: 10.1016/S1058-9813(06)80067-6. The extrapolation is performed by counting months from 80 mg down to (1-3 mg) (e.g. 80 >>> 40 >> 20 >> 10 >>> 5 >>> 2.5...equal to FIVE intervals) and adding a grace month, so 80 mg values take a "6 month" interval).

^(b) Does not include zoster vaccine recombinant because this vaccine is non-live.

^(c) Assumes a serum IgG concentration of 16 mg/mL.

^(d) The reason the interval is 6 months (and not 4 months) is that the quantity of 16.5 IgG/kg does not reflect the upper ceiling of the quantity of measles IgG in the product.

^(e) Measles vaccination is recommended for children with mild or moderate immunosuppression from HIV infection, and varicella vaccination may be considered for children with mild or moderate immunosuppression from HIV infection, but both are contraindicated for persons with severe immunosuppression from HIV or any other immunosuppressive disorder.

^(f) Contains antibody only to respiratory syncytial virus.

Adapted from Table 3-5, ACIP General Best Practice Guidelines for Immunization. January 2021

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