

# Guideline for prevention of RhD alloimmunization in RhD negative women

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Events following which immunoglobulin (Ig) G anti-D should be given to all RhD negative women with no anti-D alloantibodies

**First trimester indications** IgG anti-D sufficient dose of **50 µg\***

termination of pregnancy

spontaneous abortion followed by instrumentation

ectopic pregnancy

chorionic villus sampling

partial molar pregnancy

**Second and third trimester indications** IgG anti-D sufficient dose of **100 µg\***

amniocentesis

cordocentesis

other invasive prenatal diagnostic or therapeutic procedures

spontaneous or induced abortion

intrauterine fetal death

attempt at external cephalic version of a breech presentation

abdominal trauma

obstetric haemorrhage

**Antenatal prophylaxis at 28<sup>th</sup> weeks of gestation** IgG anti-D sufficient dose of **250 µg\***

**Delivery of an RhD positive infant\*\*** IgG anti-D sufficient dose of **100 µg\***

**Minimal dose\*:** before 20 weeks gestation 50 µg (250 IU)  
after 20 weeks gestation \*\*\* 100 µg (500 IU)

**Timing:** as soon as possible, but no later than **72 hours** after the event.

In cases where prevention of RhD alloimmunization is not performed within 72 hours of a potentially sensitising event, it is still reasonable to administer IgG anti-D within 13 days, and in special cases, administration is still recommended up to a maximum interval of 28 days postpartum.

\* administration of a higher dose of IgG anti-D is not a mistake

\*\* also if the D type is not known

\*\*\* simultaneous assessment of the volume of fetomaternal hemorrhage (FMH) to specify the dose is suitable

#### **The FMH volume assessment**

If the volume of fetal erythrocytes (red blood cells, RBCs) which entered maternal circulation is assessed, intramuscular administration of IgG anti-D in a dose of 10 µg per 0.5 mL of fetal RBCs or 1 mL of whole fetal blood is indicated. IgG anti-D in a dose of 10 µg administered intramuscularly should cover 0.5 mL of fetal RhD positive RBCs or 1 mL of whole fetal blood. FMH is fetal RBC volume; fetal blood volume is double (expected fetal hematocrit is 50%).