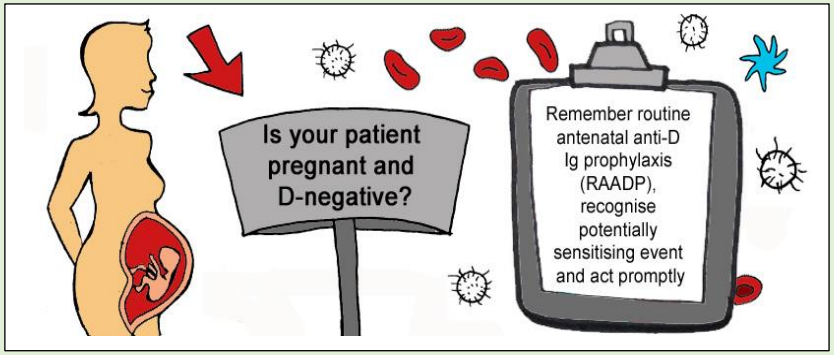
Anti-D Immunoglobulin (Ig) Administration to avoid sensitisation in pregnancy - an aide memoire

Key points to note:

- Women who are confirmed to have immune (allo) anti-D do not need (or should not receive) anti D Ig
- Where the results of the cffDNA (cell free fetal DNA) test are available and show that the fetus/baby is D-negative, anti-D Ig does not need to be given
- Confirm that the cffDNA result relates to the current pregnancy
- Person administering anti-D Ig should confirm the woman's' identity, discuss risk/benefits, gain informed consent and record in patient's notes. Confirm product dose and expiry date
- Following potentially sensitising events (*PSE- see appendix 1)*, anti-D Ig should be administered as soon as possible and always within 72 hours of the event. If, exceptionally, this deadline has not been met some protection may be offered if anti-D Ig is given up to 10 days after the sensitising event. After 10 days refer to local policy
- Each new sensitising event should be managed with an appropriate additional dose of anti-D Ig regardless of timing or dose of anti-D Ig administered for a previous event
- In the event of continual uterine bleeding which is clinically judged to represent the same sensitising event, with no features suggestive of a new presentation or a significant change in pattern or severity of bleeding, a minimum dose of 500 IU anti-D Ig should be given at 6 weekly intervals with 2 weekly estimations of fetomaternal haemorrhage (FMH)
- Appropriate tests for FMH should be carried out for all D-negative pregnancies when a PSE has occurred after 20 weeks of gestation and additional dose(s) of anti-D Ig should be administered as necessary
- Routine Antenatal Anti-D Ig Prophylaxis (RAADP) is a separate entity and should be always be given at the appropriate time in the second trimester, even if one or more doses of anti-D Ig for PSE have been administered
- Diagnosis AND delivery of intrauterine death (IUD) are 2 separate sensitising events



Potentially sensitising events (PSE) during pregnancy *(see Appendix 1 on next page)*	
Gestation LESS than 12 weeks	
Vaginal bleeding associated with abdominal pain	Administer at least **500 IU** anti-D Ig within 72 hours of event. Confirm patient details and administration details **
Evacuation of retained products of conception (ERPC) / instrumentation of uterus	
Medical or surgical termination of pregnancy**(See updated information from NICE guidance NG126 and NG140 in the shaded text box on the next page)*	
Ectopic / molar pregnancy	
Gestation 12 to 20 weeks	
For any PSE	Administer at least **500 IU** anti-D Ig within 72 hours of event. Confirm patient details and administration details **
For continuous uterine bleeding (see key points above)	
Gestation 20 weeks to term	
For any PSE (**Irrespective** of whether RAADP has been given)	Request a test for FMH (e.g. Kleihauer Test) and immediately administer at least **500 IU** anti-D Ig within 72 hours of event. Confirm patient details and administration details **
Does the test for FMH (e.g. Kleihauer test) indicate that further anti-D Ig is required?	Administer more anti-D Ig following discussion with laboratory and ensure woman is followed up until all fetal cells have been cleared

Anti-D Immunoglobulin (Ig) Administration - an aide memoire

SHOT Serious Hazards of Transfusion

Routine antenatal anti-D Ig prophylaxis (RAADP)	
Sampling for Routine Antenatal Anti-D Prophylaxis (**Irrespective** of whether anti-D Ig has already been given for PSE)	Take a blood sample to confirm group & check antibody screen prior to anti-D Ig administration– do not wait for results before administering anti-D Ig
Administration of Routine Antenatal Anti-D Prophylaxis (**Irrespective** of whether anti-D Ig has already been given for PSE)	Administer **1500 IU** anti-D Ig at **28 – 30** weeks **OR** Administer at least **500 IU** anti-D Ig at **28** weeks and then administer at least **500 IU** anti-D Ig at **34** weeks Confirm patient details and administration details **
At delivery (or Intrauterine death (IUD) >20 weeks)	
Is the baby's group confirmed as D-positive? OR Are cord samples not available following IUD?	Request a test for FMH (e.g. Kleihauer Test) Administer at least **500 IU** anti-D Ig within 72 hours of delivery Confirm patient details and administration details **
Does the test for FMH (for e.g. Kleihauer Test) indicate that further anti-D is required?	Administer further dose(s) of anti-D Ig as advised by your laboratory and ensure woman is followed up until all fetal cells have been cleared
***** Confirm correct product batch number & expiry date, IU dose and patient's ID with the authorisation/product label. Document date & time given***	

***Updated recommendations as per NICE guidance NG140:** Offer anti-D prophylaxis to women who are rhesus D negative and are having an abortion after 10^{+0} weeks' gestation. Do not offer anti-D prophylaxis to women who are having a medical abortion up to and including 10^{+0} weeks' gestation. Consider anti-D prophylaxis for women who are rhesus D negative and are having a surgical abortion up to and including 10^{+0} weeks' gestation. Providers should ensure that: rhesus status testing and anti-D prophylaxis supply does not cause any delays to women having an abortion and anti-D prophylaxis is available at the time of the abortion.*

***NG 126:** Offer anti-D rhesus prophylaxis at a dose of 250 IU (50 micrograms) to all rhesus-negative women who have a surgical procedure to manage an ectopic pregnancy or a miscarriage. Do not offer anti-D rhesus prophylaxis to women who: receive solely medical management for an ectopic pregnancy or miscarriage **or** have a threatened miscarriage **or** have a complete miscarriage **or** have a pregnancy of unknown location. Do not use a Kleihauer test for quantifying feto-maternal haemorrhage.*

***British Society for Haematology** have issued an update to their guidelines on 3rd Feb 2020 and state that the more recent NICE guidance, noted above, should be referred to in relation to ectopic pregnancy and also abortion care pending an update the BSH guidelines (https://b-s-h.org.uk/guidelines/guidelines/use-of-anti-d-immunoglobin-for-the-prevention-of-haemolytic-disease-of-the-fetus-and-newborn/)*

Appendix 1- Potentially sensitising events in pregnancy (From the 'BCSH guideline for the use of anti-D immunoglobulin for the prevention of haemolytic disease of the fetus and newborn 2014 ')

Amniocentesis, chorionic villus biopsy and cordocentesis	*Evacuation of molar pregnancy*	*Ectopic pregnancy*
Antepartum haemorrhage/Uterine (PV) bleeding in pregnancy	*Ectopic pregnancy*	*Miscarriage, threatened miscarriage*
External cephalic version	*Intrauterine death and stillbirth*	*Therapeutic termination of pregnancy*
Abdominal trauma (sharp/blunt, open/closed)	*In-utero therapeutic interventions (transfusion, surgery, insertion of shunts, laser)*	*Delivery – normal, instrumental or Caesarean section*

This aide-memoire has been updated in March 2020 with the recent NICE guidance (NG140 and NG 126) and is based on BSH Guidelines titled 'BCSH guideline for the use of anti-D immunoglobulin for the prevention of haemolytic disease of the fetus and new born 2014 ' which can be accessed via this link: https://onlinelibrary.wiley.com/doi/epdf/10.1111/tme.12091 .
Another useful relevant resource from NICE can be found at this link: https://www.nice.org.uk/guidance/ta156/chapter/1-Guidance.
Please note that this document has been reviewed and approved by the BSH Transfusion Taskforce as well as members of the SHOT SG/WEG and is only for reference to help draft checklists locally.