

Learnbloodtransfusion e-learning: transfusion and anti-D

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Learnbloodtransfusion (LBT)

- a suite of transfusion-related e-learning courses
- created in 2005 by the SNBTS
- endorsed by all 4 UK Blood Transfusion Services
- developed to ensure that all healthcare workers can participate safely in the transfusion process*

**should be used a part of a training programme, including face to face and competency assessment*

Seven LBT courses:

- **Safe Transfusion Practice**
- Safe Transfusion Practice (Paediatrics)
- Blood Components and Indications for Use
- Good Manufacturing Practice
- **Anti-D Clinical**
- Anti-D Laboratory
- Learn Cell Salvage

Topics covered in the courses include:

- ABO blood group system and serology
- The correct procedures for each step in the transfusion process
- Blood components and derivatives and their indications for use
- The management of massive transfusion
- Recognising and managing a transfusion reaction
- Good manufacturing practice (GMP)
- Anti-D and Haemolytic Disease of the Foetus and Newborn (HDN)
- Blood Conservation
- Cell Salvage

Safe Transfusion Practice



Blood and Transplant

The sessions:

1. Haemovigilance in the UK and ROI
2. Blood Group Serology
3. Requesting Procedures
4. Sampling Procedures
5. Collection Procedures
6. Administration Procedures
7. Management of Transfused Patient

Designed for:

- Doctors
- Nurses
- Midwives
- ODPs
- Clinical support workers
- Phlebotomists
- Porters
- Biomedical scientists
- Medical laboratory assistants

Learning outcomes:

- ✓ Identify the most common errors in the transfusion process
- ✓ Describe basic ABO serology
- ✓ Describe the correct procedures for all the steps in the transfusion process
- ✓ Explain the initial action required to manage an adverse event

Blood Components and Indications for Use



Blood and Transplant

The sessions:

1. Safe and Appropriate Transfusion Practice
2. Blood Group Serology
3. Red Blood Cells
4. Platelets
5. Plasma Components
6. **Massive Transfusion**
7. Plasma Derivatives
8. Adverse Effects of Transfusion

Designed for:

- Doctors
- Nurses
- Midwives
- ODPs
- Blood transfusion trainers

Learning outcomes:

- ✓ Demonstrate an understanding of the ABO blood group system
- ✓ Summarise the pre-transfusion testing process and selection of compatible blood components
- ✓ Describe the different blood components/derivatives that are available and the indications for their use
- ✓ Describe the common signs and symptoms of a transfusion reaction and outline how to take appropriate action
- ✓ Illustrate how you are professionally accountable in relation to the transfusion process

Anti-D Clinical



Blood and Transplant

The sessions:

1. Understanding Maternal Sensitisation
2. Anti-D Prophylaxis
3. Management of Pregnancies at Increased Risk
4. Anti-D – Routine Use
5. Anti-D – Informed Decision Making
6. Anti-D – Safe Storage and Administration

Designed for:

- Obstetricians
- General Practitioners
- Midwives
- Nurses

Learning outcomes:

- ✓ Explain the significance of RhD during pregnancy, antibody formation following fetomaternal haemorrhage and how anti-D immunoglobulin prevents sensitisation
- ✓ Describe the impact that anti-D prophylaxis has had on outcomes
- ✓ Discuss the management of potentially sensitising events during pregnancy and the care of women already sensitised to the RhD antigen
- ✓ Recognise the need to facilitate informed decision making in relation to anti-D
- ✓ Describe the safe storage and administration of anti-D immunoglobulin

Anti-D Laboratory



Blood and Transplant

The sessions:

1. Understanding Maternal Sensitisation
2. Anti-D Prophylaxis
3. Routine Laboratory Testing in Pregnancy
4. The Role of the Laboratory in Anti-D Prophylaxis
5. The Role of the Laboratory in Anti-D Sensitised Pregnancies

Designed for:

- Hospital transfusion laboratory staff
- Obstetricians
- General Practitioners
- Midwives
- Nurses

Learning outcomes:

- ✓ Explain the significance of RhD during pregnancy, antibody formation following fetomaternal haemorrhage and how anti-D immunoglobulin prevents sensitisation
- ✓ Describe the impact that anti-D prophylaxis has had outcomes
- ✓ Discuss the role of the routine blood transfusion and haematology laboratories in pregnancy, role of the laboratory in anti-D prophylaxis and the role of routine laboratory and reference laboratories in the management of sensitised pregnancies

Learn Cell Salvage



Blood and Transplant

The sessions:

1. Basic Blood Facts
2. Blood Conservation
3. Intraoperative Cell Salvage
4. Postoperative Cell Salvage

Designed for:

- Doctors
- Nurses
- ODPs
- Cell salvage operators
- Clinical perfusionists
- Clinical support workers

Learning outcomes:

- ✓ Describe the basic composition and physiology of blood
- ✓ List the donor blood components that are currently available for clinical use in the UK
- ✓ Understand the importance of planning a blood conservation strategy for a surgical patient
- ✓ Explain the indications and limitations of the various blood conservation techniques available

Quality assurance

- Content led by UK-wide transfusion network
- Managed by an editorial board
 - of transfusion specialists
 - from all 4 UK BTSs
- 2 yearly review cycle on all courses
 - review groups made up from specialists and users in clinical practice

How do you access LBT e-learning?

- LearnPro (www.learnbloodtransfusion.org.uk)
- NLMS [ESR OLM]
- e-Learning for Healthcare (e-LfH)
- Contact your Transfusion Practitioner or Learning and Development department to find out more
- Alternatively, you can contact NHSBT.CustomerService@nhsbt.nhs.uk