



# For Blood Bank Nurses

Training Program

Ministry of Health and Family Welfare
Government of India

भानु प्रताप शर्मा सचिव B.P. SHARMA Secretary



भारत सरकार रवारथ्य एवं परिवार कल्याण विभाग रवारथ्य एवं परिवार कल्याण मंत्रालय Government of India Department of Health and Family Welfare Ministry of Health and Family Welfare

#### **Foreword**

Blood Transfusion Services in India have advanced significantly through the Blood Safety Program which has been an integral part of all phases of the National AIDS Control Programme since 1992. This has contributed immensely in improving access to safe and quality blood, and in promotion of Voluntary Blood Donation, and has also led to several advancements in terms of better policies, improved infrastructure and adoption of modern technologies.

Capacity building and training are a vital part of service delivery. Regular and standardized training leads to improvements in the knowledge, skills and standards of personnel providing blood transfusion services. The scope of a standardized training curriculum on Blood Transfusion Service is to train the Medical Officers, Staff Nurses, Counselors and Lab Technicians of the Blood Bank to become totally familiar with the basic techniques of Blood Banking, and to help them adopt techniques which comply with the regulatory framework in the field of Blood Transfusion.

The set of training modules is intended to emphasize Good Laboratory Practices (GLP) and Quality Management Systems (QMS) in Blood Transfusion Services. Training would be imparted through identified centres identified by National AIDS Control Organization, Ministry of Health and Family Welfare. These training centres will work towards capacity building for all cadres of the Blood bank staff across all facilities situated in different regions of the country.

I am confident that this training module would be very useful for all in the field of blood transfusion services.

(B.P. Sharma)





एन。 एस。 कग, भा.प्र.से अपर सचिव NAVREET SINGH KANG, IAS Aditional Secretary स्वास्थ्य एवं परिवार कल्याण मंत्रालय राष्ट्रीय एड्स नियंत्रण संगठन Government of India Ministry of Health & Family Welfare

**National AIDS Control Organisation** 

भारत सरकार

**Preface** 

The goals and objectives of the Blood Safety Programme are to ensure the provision of safe and quality blood, even to remote areas of the country. National AIDS Control Organisation (NACO) supports a network of about 1200 Blood Banks in the Government and Charitable sectors through provision of equipment, consumables, manpower and capacity building. Nearly 70% of the country's blood requirement is met through this network. The scenario of blood banking in India owes much of its modernization due to the efforts made during various phases of the National AIDS Control Programme (NACP).

During NACP IV, NACO has identified specific areas for strengthening technical and service quality standards, management structures, partnership mechanisms, and monitoring and evaluation systems to achieve the objective of catering to the country's blood requirements through a nationally coordinated and well networked Blood Transfusion Service.

Blood Transfusion Services Division, NACO and the National Blood Transfusion Council are committed to improve all aspects of Blood Transfusion Services in coordination with State AIDS Control Societies and State Blood Transfusion Councils. With rapid technological advancement in transfusion medicine, there is a felt need for an elaborative and standardized training curriculum so as to comply with the Indian health Policy Framework. The current training curriculum is based on changing needs of transfusion professionals.

This training module has been prepared with an objective of introducing uniform standards in all aspects of blood banking for medical officers, staff nurses, counselors and laboratory technicians working in the blood banks. The module is designed for the better understanding and comprehension of blood banking processes and procedures, in order to improve technical and managerial skills of the personnel.

Appropriate in-service training programmes will facilitate provision of trained manpower to enhance quality of transfusion services and to keep abreast with the latest developments in this fast changing field.

( N.S. Kang

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#### Acknowledgement

The Training Module for Blood Bank Medical Officers and Laboratory Technicians has been developed by Blood Transfusion Services Division, NACO and National Blood Transfusion Council, Ministry of Health and Family Welfare under the guidance and active leadership of Shri. Lov Verma, I.A.S, Ex-Secretary (Health) and Shri. B.P. Sharma, I.A.S, Secretary (Health).

The constant encouragement of Shri. N.S.Kang, Additional Secretary NACO and Shri. K.B. Agarwal, IAS, Joint Secretary, NACO have greatly helped in undertaking this important activity.

A special thanks to Dr. Shobini Rajan, Assistant Director General (BTS); Dr Harprit Singh, National Programme Officer (BTS) and Dr. Shanoo Mishra, Programme Officer Quality (BTS), NACO and other team members for their constant effort and hard work in preparing the module.

It is commendable to note that a comprehensive set of document has been reviewed with the coordinated and concerted efforts of various organizations and individuals from the Apex Training Institutes, PGI Chandigarh, KEM Mumbai and CMC Vellore. A detailed list of contributors is included within this document. My heartfelt thanks to all for their expertise and time spared towards technical review.

I extend my sincere thanks to the U.S. Centers for Disease Control and Prevention-Division of Global HIV/AIDS (CDC-DGHA), India and Christian Medical Association of India (CMAI) for providing technical assistance and support for the preparation of this set of modules.

(Dr. R.S Gupta)

Dr. Jagdish Prasad M.S., M.Ch., FIACS Director General of Health Services



भारत सरकार

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दिनांक/Dated.....

#### Message

Ensuring the safety and availability of Blood and Blood products is an essential Public Health responsibility. Measures to ensure blood safety also play a major role in preventing the transmission of HIV, Hepatitis virus and other Blood borne pathogens in health care settings.

Access to sufficient and safe Blood and Blood products provided within a National Blood System is a vital component in achieving Universal health coverage. So far, Blood Transfusion Services were available only through established Blood Banks extending up to district level. In 2003, under National Health Mission these services were made available at sub-district level through Blood Storage Units at First Referral Units. These Centres were aimed at meeting the requirements of blood for pregnant women requiring blood transfusions during pregnancy or labour.

For quality, safety and efficacy of Blood and Blood products, well equipped Blood Centres with adequate infrastructure and trained manpower is an essential requirement. To ensure effective clinical use of Blood and to maintain quality standards in Blood Banking procedures, training of clinical staff is important.

18 Training Institutes are identified to enhance quality services in Blood Transfusion Services. These Training Institutes will work towards capacity building of the Blood Banks through standardized Training Curriculum for all cadres of staff in the Blood Banks.

These revised editions of training modules for Blood Bank staff will be a useful resource for standardizing Blood Transfusion services across blood banks situated in different regions of the country. My congratulations to, Dr. R.S. Gupta, DDG, the BTS team at NACO and other organizations who contributed in the development of these modules.

(Dr Jagdish Prasad)



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# Message

Access to safe blood and maintaining standards in Blood Transfusion Services (BTS) is the predominant responsibility of NBTC. Currently, a network of 1161 blood banks is under the umbrella of NACO support and it is essential to provide regular Training to the Blood Bank staff, throughout the country.

This series of training modules is designed to train the blood bank staff on the basic techniques of Blood Banking which comply with worldwide standards in the field of Blood Transfusion.

The module is intended to incorporate Good Laboratory Practices (GLP), Good Manufacturing Practices (GMP) and quality systems for Blood Bank personnel.

18 Training Institutes have been indentified under NACP IV. These Training Institutes will work towards capacity building of the Blood bank staff through standardized training curriculum for all cadres of staff in Blood Banks.

I would like to place on record my appreciation to Dr. R.S. Gupta, DDG BTS Division, Dr. S. D. Khaparde, ex- DDG, the BTS team at NACO and other organizations who contributed to the development of these guidelines.

(KB Agarwal) 295115

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		DAY 1			
Time	Session	Activity	Methodology	Duration	Resource Person
9.00am -9.30am		Registration	Group activity	30 minutes	Training Coordinator
		Activity 1: Participant introduction	lce breaker	15 minutes	
9.30am -10.10am	Session 1 Introduction	Activity 2: Expectation of the participants	Individual Activity	5 minutes	Senior Staff Nurse
		Activity 3: Pre training assessment	Individual Activity	20 minutes	
40.40 40.45	Session 2: Introduction to National	Activity 1: Over view of National blood safety program	Video	15 minutes	SACS Quality
10.10am -10.45am	blood safety program & National Blood Policy	Activity 2: National Blood policy	Power point presentation	20 minutes	Manager
10.45am -11.00am		TEA BREAK			
		Activity 1:Donor recruitment and retention	Power point presentation	30 minutes	
11.00am -1.00pm	Session 3: Blood donor selection	Activity 2: Donor room procedure & Adverse Donor Reaction	Power point presentation & Trigger video	60 minutes (Video- 20 minutes , PPT- 40 minutes)	Senior Counsellor, Senior Staff Nurse, Senior Doctor/MO Blood bank
		Activity 3: Organizing of blood donation camp	Group activity	30 minutes	Blood barik
1.00pm -1.45pm		LUNCH			
		Activity1: Basic red cell serology	Power point presentation	30 minutes	
1.45pm - 3.30 pm	Session 4: Immunohematology	Activity 2: ABO and Rh grouping & Typing	Power point presentation & Trigger video	60 minutes (Video- 20 minutes, PPT- 40 minutes)	Senior Doctor/MO blood bank
		Activity 3: Basics of ABO grouping discrepancies	Power point presentation	15 minutes	
3.30pm - 3.45pm		TEA BREAK			
3.45pm - 4.45pm	Session 4 : Immunohematology – Continuation	Activity 4: Laboratory demonstration - HB estimation, ABO , RH Grouping & typing)	Laboratory demonstration	60 minutes	Senior lab technician

for Blood Bank Nurses

\_\_\_ DAY 1\_\_\_

#### Session 1:Introduction

#### Activity 1: Participant introduction

#### Objective:

 This activity will set the tone for the workshop: it is easy and fun, it helps participants to relax and start to get to know each other Time:15 Minutes

Material:Soft ball

#### Methodology

Ice breaker

#### Instructions to the Facilitators:

- Ask the participants to sit in a circle
- The facilitator can introduce him/herself first
- Throw the ball to one of the participants
- The participant who holds the ball has to introduce him/herself to the group by saying out aloud their name, designation, workplace & hobby.
- The participant holding the ball will now throw it to anyone in the group. The person who gets the ball now introduces him/herself.
- The activity continues till all the participants have introduced themselves.

#### Session 1: Introduction

### Activity 2:Expectation of the Participants

### Objective:

• It is important to know what the participants expect from the training. This can also be used at the end to see how much of the expectations have been met.

Time: 5 Minutes

Materials: Paste it slips & Pen

#### Methodology

Individual Activity

#### Instructions to the Facilitators:

- The facilitator requests the participants to write down their expectations from the training sessions on the paste it slips provided to them.
- The slips are collected and then displayed.

**NOTE:** The expectations must be displayed till the end of the training.

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DAY 1

**Session 1: Introduction** 

Activity 3: Pre Training Assessment

Objective:

• To assess the knowledge of the participants

Time: 20 Minutes

Materials: Questionnaire

## Methodology

Individual Activity

#### Instructions:

- The facilitator will circulate the questionnaire to the participants to be filled up and returned.
- No negative markings
- The pre training questions must be corrected and kept ready before the last day of training.

# Session 2:Introduction to National Blood Safety Program and National Blood Policy

Activity 1: Overview of National Blood Safety Program.

### Objective:

To explain the need of the training program.

• To recall the functions of blood bank.

To brief the national blood policy

Time:15 Minutes

Materials: Projector, screen and

pointer

#### Methodology

Video Presentation

#### Instructions:

- The facilitator needs to project the documentary video
- The facilitator shall watch the video prior to the session.
- Facilitator has to probe the participants to share their views.

#### Summarise:

- Quickly recap the evolution of the National Blood safety program.
- Clarify any questions by the participants

#### Reference:

• Kindly refer to video presentation: Day 1 - Session 2 - Activity 1

for Blood Bank Nurses

**DAY 1** 

# Session 2: Introduction to National Blood Safety Program and National Blood Policy

Activity 2: National Blood Policy

#### Objective:

• To create an awareness of the National Blood Policy

Time: 20 Minutes

Material: Projector, Screen, Pointer

#### Methodology

Power Point Presentation

#### Instructions:

- Please try to explain the crux of the contents in each slide.
- Do not just read out the points.
- Please clarify the participant's queries

#### Summarise:

- 1. What are the core points discussed under slide presentation?
- 2. What did you learnt from the group activities?

#### Reference:

- National Blood policy 2002, Revised version 2007
- PPT No: Day 1 Session 2 Activity 2

## **Session 3: Blood Donor Selection**

### Activity 1: Donor Recruitment and Retention

#### Objective:

- To describe the methodology of donor identification and selection
- To explain in detail about the donor education
- To brief about the donor care and satisfaction
- To list the reason for donor retention

Time: 30 Minutes

**Materials:** Projector, screen and pointer

#### Methodology

Power point presentation

# Instructions:

- Please try to explain the crux of the contents in each slide.
- Do not just read out the points.
- Please darify the participant's queries
- The participants should be able to demonstrate the knowledge & skills to recruit retain & recall donor.

#### Summarise:

- 1. The learning out comes
- 2. What are all the points were discussed under case scenario?
- 3. What did you learnt from the Lab demo?

#### Reference:

- Kindly refer Chapter No.1, sub topic no. 1.1, of the Nurses Module
- PPT No: Day 1 Session 3 Activity 1

for Blood Bank Nurses

**DAY 1** 

## **Session 3: Blood Donor Selection**

# Activity 2: Donor Room Procedure and Adverse Donor Reaction

## Objective:

- To enumerate the types of donors and explain them in detail
- To discuss in detail about the different methods & measurement of hemoglobin
- To brief about the donor selection procedure for whole blood collection, donor registration and blood collection procedure
- To explain about the post donation care and the donor reaction & prevention

Time: 30 Minutes

**Material:** Projector, screen and pointer

#### Methodology

Power Point Presentation & Trigger Video

#### Instructions:

#### **Step 1: Power Point Presentation**

- The following two topics to be covered
  - a) Types of donor, donor registration,& selection for whole blood collection & procedure
  - b) Post donation care ,donor reaction & prevention
- Please try to explain the crux of the contents in each slide. Do not just read out the points.
- Please clarify the participant's queries

#### Step 2: Trigger Video on Haemoglobin estimation

- Facilitator should ensure necessary arrangements for Trigger video presentation.
- The following two topics to be covered.
  - a) Haemoglobin Estimation
  - b) Phlebotomy procedure
- Please instruct the participants that there would be questions at the middle of the video presentation, which the participants have to answer.

#### Summarise:

- 1. How will you select a donor for whole blood collection?
- 2. Explain about the different methods of haemoglobin measurement?
- 3. List down the steps involved in post donation care?

#### Reference:

- Kindly refer Chapter No.1, sub topic no. 1.2, of the Nurses Module
- PPT No: Day 1 Session 3 Activity 2

for Blood Bank Nurses

**DAY 1** 

### **Session 3: Blood Donor Selection**

# Activity 3: Organisation of Blood Donation Camps

#### **Objective:**

• To illustrate the list of procedures required to organize a blood donation camp.

Time: 30 Minutes

**Materials:** Charts, Sketch Pens & Double tape

# Methodology

Group Activity

#### Instructions:

#### 1.Group activity

- Divide the participants into 4 groups
- Assign one of the following activities to each group.
- Each group should work as a team on the activity assigned to them
- A volunteer from each group should make a short presentation on their group activity.

List of Activities to be assigned to each group for this session are:

- Pre Camp activities & Challenges faced
- 2. Camp site activities & Challenges faced
- Equipment required during camp & Challenges faced
- Records, Storage & Transportation of collected Blood units& Challenges faced

#### Note:

- Time for group discussion: 10 minutes
- Time for presentation by each group: 5minutes(Total time: 20 minutes)
- Ask other groups to comment on any missed out points.

#### Summarise:

What core points discussed by groups?

#### Reference:

• Kindly refer Chapter No.1, sub topic no. 1.3, of the Nurses Module

for Blood Bank Nurses

**DAY 1** 

Session4: Immunohaematology

Activity1: Basic Red Cell Serology

## Objective:

- To describe about the basic red cell serology
- To brief about the types of blood groups, Rh antibodies & the blood group principles.
- To explain about the ABO & Rh grouping & compatibility testing

Time:30 Minutes

**Material:** Projector, screen and pointer, Samples for demo Lab

## Methodology

Power Point Presentation

#### Instructions

Power Point Presentation on Basic red cell serology

- Please try to explain the crux of the contents in each slide.
- Do not just read out the points. Please clarify the participant's queries

#### Summarise:

1. Ask participants on the key learnings from this session

#### Reference:

- Kindly refer Chapter No.2, sub topic no. 2.1, of the Nurses Module
- PPT No: Day 1 Session 4 Activity 1

Session4: Immunohaematology

Activity 2: ABO & Rh Grouping and Typing

### Objective:

- To discuss the different methods of storage
- To brief about the roles & responsibilities of nurses in storage of blood & its components

**Time:** 60 Minutes (PPT- 40 minutes, Video- 20 minutes)

**Material:** Projector, screen and pointer

#### Methodology

Power Point Presentation and Trigger Videos

for Blood Bank Nurses

\_\_\_ DAY 1\_\_\_

#### Instructions:

#### Step 1: Power Point Presentation

- Please try to explain the crux of the contents in each slide. Do not just read out the points.
- Please clarify the participant's queries

# Step 2: Trigger Videos

- Facilitator should ensure necessary arrangements for Trigger video presentation.
- The following topic is to be covered.
  - a) ABO grouping & RH typing
- Please instruct the participants that there would be questions at the middle of the video presentation, which the participants have to answer.

#### Summarise:

- What are the core points discussed in this presentation?
- How does it relate to your work?

#### Reference:

- Kindly refer Chapter No.2, sub topic no. 2.2, of the Nurses Module
- PPT No : Day 1 Session 4 Activity 2

# Session 4: Immunohaematology

# Activity 3: Basics of ABO Grouping Discrepancies

#### Objective:

To explain basics of discrepancies in ABO grouping

Time: 15Minutes

**Material:** Projector, Screen, Pointer.

#### Methodology

Power Point Presentation

#### Instructions:

#### **Step 1: Power Point Presentation**

- Please try to explain the crux of the contents in each slide. Do not just read out the points.
- Please clarify the participant's queries

#### Summarize:

- 1. What are the core points discussed in this presentation?
- 2. How does it relate to your work?

#### Reference:

PPT No : Day 1 - Session 4 - Activity 3

for Blood Bank Nurses

**DAY 1**=

# Session 4: Immunohaematology

Activity 4: Lab Demonstration - HB Estimation, ABO , RH Grouping and Typing

## Objective:

• To provide hands on exposure to HB estimation, ABO, RH Grouping and Typing.

Time: 60 Minutes

Material: Samples for demo

### Methodology

• Lab Demonstration

#### Instructions:

- 1. Facilitator should ensure that necessary arrangements for demonstration have been made at the lab.
- 2. Accompany participants to the concerned lab.
- 3. Participants need to be divided into 2 groups. The following topics would be demonstrated for each group.
  - a. HB estimation
  - b. ABO, RH Grouping and Typing
- 4. The groups then swap to do the other procedure

#### Summarize:

Ask participants on the key learnings from this session

	DAY 2						
Time	Session	Activity	Methodology	Duration	Resource Person		
9.00am -9.30am	Warming Up	Recap of DAY 1 Session	Presentation	30 minutes	Rapporteur & time keeper		
9.30am - 10.30am	Session 1: Transfusion	Activity 1: Basics of TTI	Power point presentation	30 minutes	Senior staff nurse		
9.50am - 10.50am	transmissible infections	Activity 2: Screening of TTI	Laboratory demonstration	30 minutes	Senior Lab technician		
10.30am–11.30am	Session 2: Bio safety & Waste management	Activity 1: Bio safety	Power point presentation & video	60 minutes (Video- 20 minutes, PPT- 40 minutes)	Senior Doctor/MO blood bank & Staff nurse		
11.30am–11.45am	TEA BREAK						
11.45am-12.Noon	Session 2: Bio safety &	Activity 2: "Bin it in a minute" Game	Individual Activity	15 minutes	Participants		
12Noon – 1.00pm	Waste management (contd.)	Activity 3: Bio medical waste management	Power point presentation	60 minutes	Senior Doctor/MO blood bank		
1.00pm – 1.45pm		LUNC	СН				
1.45pm – 2.15pm	Session 3: Equipment management & calibration	Activity 1: Equipment management & calibration	Power point presentation	30 minutes	Senior staff nurse & Senior Lab technician		
2.15pm – 3.15pm	Session 4: Blood Components	Activity 1: Blood components	Trigger video & power point presentation	60 minutes (Trigger video – 20 minutes, PPT – 40 minutes)	Senior Doctor/MO blood bank		
3.15pm – 3.30pm		TEA BR					
3.30pm – 3.45pm	Session 4: Blood	Activity 2: Storage & Transportation	Power point presentation	15 minutes	Senior blood bank Staff Nurse		
3.45pm – 4.15pm	Components (contd.)	Activity 3: Administration of blood components	Power point presentation	30 minutes	Senior blood bank Staff Nurse		

for Blood Bank Nurses

**DAY 2**=

# **Session 1: Transfusion Transmissible Infections**

# Activity 1: Basics of Transfusion Transmissible Infections

# Objective:

• To recognize Transfusion Transmissible Infections

To understand the characteristics of TTIs.

#### Time: 30 Minutes

Material: Projector, Screen and

Pointer

#### Methodology

• Power Point Presentation

#### Instructions:

Power Point Presentation on

- 1. Epidemiology & Screening of Hepatitis B & Hepatitis C
- 2. Epidemiology & Screening of HIV
- 3. Epidemiology & Screening of Malaria
- 4. Epidemiology & Screening of Syphilis
- Please try to explain the crux of the contents in each slide.
- Do not just read out the points. Please darify the participant's queries

#### Summarize:

- What are the core points discussed in this presentation?
- How does it relate to your work?

#### Reference:

- Kindly refer Chapter No.3, of the Nurses Module
- PPT No: Day 2 Session 1 Activity 1

# Session 1: Transfusion Transmissible Infections Activity 2: Screening of TTIs

#### **Objective:**

Describe the blood screening process

• Explain Preventive strategies for TTIs.

Time: 30 minutes

Material: Samples for demo

#### Methodology

Laboratory Demonstration

#### Instructions:

- 1. Ensure that the necessary arrangements for the demonstration have been made at the concerned lab.
- 2. Accompany the participants to the concerned lab.
- 3. Divide the participants into two/ more groups depending on the number of participants.
- 4. Each group will do one lab procedure
- 5. The groups then swap to do the other procedure.

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**DAY 2**=

#### Summarize:

· Ask participants on the key learnings from this session

# Session 2: Bio Safety & Waste Management

## Activity 1: Bio Safety

## Objectives:

- To explain about the modes of exposure to blood borne pathogens
- To brief about the essentials steps of bio safety
- To discuss in detail about the bio medical waste management
- To enumerate the roles & responsibilities of nurse in bio safety

**Time:** 60 Minutes (Video- 20 minutes, PPT- 40 minutes)

**Materials:** Projector, screen and pointer

# Methodology

Power Point Presentation and Video

#### Instructions:

### **Step 1: Power Point Presentation**

- Please do not read through all the points
- Summarise the slide and present
- If there are any queries from the participants kindly clarify them

#### Step 2: Video Show

- The facilitator/resource person shall watch the video prior to the session.
- Play the video show to the participants.
- Probe the participants to share their views.
- Now summarize the core content of the video show.

#### Summarise:

- 1. What are the core points discussed under case scenario?
- 2. What did you learnt from the group activities?

#### Reference:

- Kindly refer Chapter No.4, of the Nurses Module
- PPT No : Day 2 Session 2 Activity 1

for Blood Bank Nurses

**DAY 2** 

# Session 2: Bio Safety and Waste Management

Activity 2: "Bin in it in a minute" Game

## **Objectives:**

 To discuss in detail about the bio medical waste management Time: 15 Minutes

Materials: Color coded Bucket & Ball

# Methodology

Individual Activity

#### Instructions:

- Arrange the colour coded bins.
- Ask participants to come in batches of 5.
- Hand over three balls to each of the participants.
- Ask participants to come forward and throw balls in the appropriate coloured bins.
- Ensure all participants participate.
- Rectify the mistakes if participants throw the ball in the wrong bin.

#### Summarise:

Was the game on waste segregation useful?

# Session 2: Bio Safety and Waste Management

Activity 3 : Bio Medical Waste Management

#### Objectives:

- To discuss in detail about the color coded bins
- To explain the method of disposal

Time: 45 Minutes

Materials: Projector, screen and

pointer

#### Methodology

Power point presentation

#### Instructions:

- Please do not read through all the points
- Summarise the slide and present
- If there are any queries from the participants kindly clarify them

#### Summarise:

- 1. What are the core points discussed under case scenario?
- 2. What did you learnt from the group activities?

#### Reference:

- Kindly refer Chapter No.4, sub topic no. 4.3, of the Nurses Module
- PPT No: Day 2 Session 2- Activity 3

for Blood Bank Nurses

**DAY 2**=

# Session 3: Equipment management

# 1: Equipment management & calibration

#### **Objectives:**

- To promote knowledge about the equipment's in the blood bank
- To brief about the maintenance & calibration of equipment's

Time:30 Minutes

**Materials:** Projector, screen and pointer

#### Methodology

Power point presentation

### Instructions

- Please try to explain the crux of the contents in each slide. Do not just read out the points.
- Please clarify the participant's queries.

### Summarise:

- 1. What are the core points discussed under case scenario?
- 2. What did you learnt from the group activities?

#### Reference:

• PPT No: Day 2 - Session 3 - Activity 1.

# **Session 4: Blood Components**

# Activity 1: Blood Components

# Objective:

- Describe the process of component separation
- Explain shelf life of components

**Time:** 60 Minutes (Trigger video-20 minutes & PPT - 40 minutes)

Material: Projector, Screen and

Pointer

#### Methodology

Power Point Presentation

#### Instructions

- Please try to explain the crux of the contents in each slide. Do not just read out the points.
- Please clarify the participant's queries

#### Summarize:

- What are the core points discussed in this presentation?
- How does it relate to your work?

#### Reference

- Kindly refer Chapter No.5, of the Nurses Module
- PPT No: Day 2 Session 4 Activity 1

for Blood Bank Nurses

**DAY 2** 

**Session 4: Blood Components** 

Activity 2: Storage and Transportation

Objective:

• Explain Storage and Transportation

Time: 15 Minutes

Material: Projector, Screen and

Pointer

Methodology

• Power Point Presentation

#### Instructions

- Please try to explain the crux of the contents in each slide. Do not just read out the points.
- Please clarify the participant's queries

#### Summarize:

- What are the core points discussed in this presentation?
- How does it relate to your work?

#### Reference

- Kindly refer Chapter No.5, sub topic no. 5.4 & 5.5, of the Nurses Module
- PPT No: Day 2 Session 4 Activity 2

### **Session 4: Blood Components**

Activity 3: Administration of Blood Components

#### Objective:

 Understanding about Administration of Blood Components Time: 30 Minutes

Material: Projector, Screen and

Pointer

#### Methodology

Power Point Presentation

# Instructions

- Please try to explain the crux of the contents in each slide.
- Do not just read out the points.Please clarify the participant's queries

#### Summarize:

- What are the core points discussed in this presentation?
- How does it relate to your work?

#### Reference

- Kindly refer Chapter No.5, of the Nurses Module
- PPT No: Day 2 Session 4 Activity 3

	Day 3					
Time	Session	Activity	Methodology	Duration	Resource Person	
9.00am-9.30am	Warming Up	Recap of DAY 2 Session	Presentation	30 minutes	Rapporteur & time keeper	
		Activity 1 : Pre transfusion issues	Power point presentation	30 minutes		
9.30 am-11.00 am	Session 1: Pre transfusion issues & Bed side practices & Transfusion reaction	Activity 2: Bed side practices	Power point presentation	30 minutes	Senior Staff Nurse	
		Activity 3: Transfusion reaction	Power point presentation	30 minutes		
11.00am -11.15am		TEA BREAK				
11.15am -12.15pm	Session 2 : Roles & responsibilities of Staff Nurse	Activity 1: Roles & responsibilities of Staff Nurse	Power point presentation	60 minutes	Senior Staff Nurse	
		Activity 1: "Simon Says" Game	Group activity	15 minutes	By Participants	
12.15pm - 1.00 pm	Session 3: QMS in BTS	Activity 2: Quality Management & Haemovigilance	Power point presentation	30 minutes	Senior Doctor/MO blood bank & Senior staff nurse	
1.00pm-1.45pm		LUNCH				
1.45pm - 3.15pm	Session 4: Record keeping,	Activity 1: Record keeping & documentation	Power point presentation	45 minutes	Senior Doctor/MO blood bank & Senior	
1.45pm - 3.15pm	documentation & legal aspects	Activity 2: Legal aspects of Blood bank	Power point presentation	45 minutes	staff nurse	
3.15pm-3.30pm		TEA BREAK				
3.30pm-4.00pm	Session 5: Licensing and Regulation, Drugs and Cosmetic Act	Activity 1: Licensing and Regulation, Drugs and Cosmetic Act	Power point presentation	30 minutes	Senior Doctor/MO blood bank & Senior	
4.00pm-4.30pm	Session 6: Data analysis, computer use and reporting	Activity 1: Data analysis, computer use and reporting	Power point presentation	30 minutes	staff nurse	
4.20nm 5.20nm	Session 7: Post training assessment	Activity 1:Post training assessment & feedback on quality of training	Pre Structured questionnaire	30 minutes	Training Coordinator	
4.30pm - 5.30pm	& wrap up	Activity 2: Valedictory & certificate distribution		30 minutes	Training Coordinator	

for Blood Bank Nurses

# DAY 3

# Session 1: Pre Transfusion Issues and Bed Side Practices and Transfusion Reaction

# Activity 1: Pre Transfusion Issues

#### **Objectives:**

 To brief about the procedure for collection of blood sample & pre transfusion testing Time: 30 Minutes

**Materials:** Projector, screen and pointer

#### Methodology

Power Point Presentation

#### Instructions:

- Please try to explain the crux of the contents in each slide.
- Do not just read out the points.
- Please clarify the participant's queries

#### Summarise:

- 1. What are the core points discussed under case scenario?
- 2. What did you learnt from the group activities?

#### References:

- Kindly refer Chapter No.6, of the Nurses Module
- PPT No : Day 3 Session 1 Activity 1

# Session 1: Pre Transfusion Issues and Bed Side Practices and Transfusion Reaction

#### Activity 2: Bed side practices

#### Objective:

 To explain about the pre administration checks, administration of blood & products & monitoring of recipients.

Time: 30 Minutes

 To discuss about the role of hospital transfusion committee & a nurse in pre transfusion checks. **Material:** Projector, Screen, Pointer.

#### Methodology

Power point presentation

# Instructions:

- Please try to explain the crux of the contents in each slide.
- Do not just read out the points. Please clarify the participant's queries

#### Summarise:

- What are the core points discussed under case scenario?
- What did you learnt from the group activities?

#### References:

- Kindly refer Chapter No.6, of the Nurses Module
- PPT No: Day 3 Session 1 Activity 2

for Blood Bank Nurses

# DAY 3

# Session 1: Transfusion transmissible infection & Transfusion reaction

# Activity 3: Transfusion Reaction

#### **Objectives:**

To brief about the transfusion reaction

Time: 30 Minutes

**Material:** Projector, Screen, Pointer, paper & pen

#### Methodology

Power Point Presentation

#### Instructions:

- Please try to explain the crux of the contents in each slide.
- Do not just read out the points. Please clarify the participant's queries

#### Summarise:

- What are the core points discussed under case scenario?
- What did you learnt from the group activities?

#### Reference:

- Kindly refer Chapter No.7, of the Nurses Module
- PPT No: Day 3 Session 1- Activity 3

# Session 2: Roles and Responsibilities of Staff Nurse

# Activity 1: Roles and Responsibilities of Staff Nurse

#### Objectives:

- To promote the knowledge on roles & responsibilities
- To discuss the importance of nurses role in a blood bank
- To improve the quality of nursing services.

Time: 60 Minutes

**Materials:**Projector, screen and pointer

### Methodology

Power Point Presentation

#### Instructions:

- Please try to explain the crux of the contents in each slide.
- Do not just read out the points. Please clarify the participant's queries

#### Summarise:

- 1. What are the core points discussed under case scenario?
- 2. What did you learnt from the group activities?

#### Reference:

PPT No : Day 3 - Session 2- Activity 1

for Blood Bank Nurses

DAY 3

### Session 3: QMS in Blood Transfusion Services

Activity 1: 'SIMON Says' Game

#### Objectives:

To energize the group

Time:15 Minutes

Materials: Nil

### Methodology

Group activity

#### Instructions:

- The facilitator tells the group that they should follow instructions when the facilitator starts the instruction bysaying 'Simon Says'.
- If the facilitator does not begin the instructions with the words 'Simon Says', then the group should not follow the instructions!
- The facilitator begins by saying something like "Simon says clap your hands" while clapping their hands.
- The facilitator speeds up the actions, always saying 'Simon says' first. After a short while, the 'Simon says' is omitted.
- Those participants who do follow the instructions anyway are 'out' of the game.

# Session 3 : QMS in Blood Transfusion Services Activity 2:Quality Management & Haemovigilance

# **Objective:**

- Discuss the policy & procedures for lab supplies
- Explain about the quality Assurance and Quality control in BTS.
- Explain about the Haemovigilance program of India

Time: 30 Minutes

Material: Projector, Screen and

Pointer

#### Methodology

Power Point Presentation

#### Instructions

- Please try to explain the crux of the contents in each slide.
- Do not just read out the points. Please clarify the participant's queries

#### Summarize:

- What are the core points discussed in this presentation?
- How does it relate to your work?

#### Reference:

PPT no : Day 3 - Session 3 - Activity 2

for Blood Bank Nurses

DAY 3

# Session 4: Record keeping, Documentation and Legal Aspects

# Activity 1:Record keeping and Documentation

#### **Objective:**

Emphasize the importance of record keeping & documentation

Time: 45 Minutes

**Material:** Projector, Screen and Pointer

#### Methodology

Power Point Presentation

#### Instructions

- Please try to explain the crux of the contents in each slide.
- Do not just read out the points. Please clarify the participant's queries

#### Summarize:

- What are the core points discussed in this presentation?
- How does it relate to your work?

#### Reference:

PPT no : Day 3 - Session 4 - Activity 1

# Session 4: Record keeping, Documentation and Legal Aspects

Activity 2: Legal Aspects in Blood Banking

#### **Objective:**

 To provide an understanding of the legal aspects associated with Blood Banking. Time: 45 minutes

**Material:** Projector, Screen and Pointer

#### Methodology

Power Point Presentation

#### Instructions

- Please try to explain the crux of the contents in each slide.
- Do not just read out the points. Please clarify the participant's queries

#### Summarize:

- What are the core points discussed in this presentation?
- How does it relate to your work?

#### Reference:

PPT No: Day 3 - Session 4 - Activity 2

for Blood Bank Nurses

DAY 3

# Session 5: Licensing, Regulation, Drugs and Cosmetic Act

Activity 1: Licensing, Regulation, Drugs and Cosmetic Act

### **Objective:**

• To provide an insight of licensing, regulation, Drugs and Cosmetic Act.

Time: 30 Minutes

**Material:** Projector, Screen and Pointer

#### Methodology

Power Point Presentation

# Instructions

- Please try to explain the crux of the contents in each slide.
- Do not just read out the points. Please clarify the participant's queries

#### Summarize:

- What are the core points discussed in this presentation?
- How does it relate to your work?

#### Reference:

PPT No : Day 3 - Session 5 - Activity 1

# Session 6: Data Analysis, Computer use and Reporting

Activity 1: Data Analysis, Computer Use and Reporting

#### Objective:

• To understand about data analysis, computer use and reporting.

Time: 30 Minutes

Material: Projector, Screen and

Pointer

### Methodology

Power Point Presentation

#### Instructions

- Please try to explain the crux of the contents in each slide.
- Do not just read out the points. Please clarify the participant's queries

#### Summarize:

- What are the core points discussed in this presentation?
- How does it relate to your work?

#### Reference:

• PPT No: Day 3 - Session 6 - Activity 1

for Blood Bank Nurses

DAY 3

# Session 7: Post Training Assessment and Wrap Up

# Activity 1: Post Training Assessment and Feedback on Quality of Training

#### Objectives:

- To assess the post training knowledge of the participants
- To assess the effectiveness of the training program
- To promote the methodologies of the training program

Time: 30 Minutes

**Material**: Pre-structured questionnaires & Certificates

#### Methodology

• Pre structured questions

#### Instructions:

#### Post training Assessment

- The facilitator will circulate the question naire to the participants to be filled up and returned.
- No negative markings
- The post training questions must be filled up and handed over to the facilitator.
- The filled in questionnaires to be randomly distributed back to the participants and corrected by the participants

### Feedback on quality of training

- The facilitator randomly picks out the feedback form and reads aloud the suggestions provided by the participants
- Randomly pick few slips of participants expectation pasted on the wall and read it aloud. Just ask participants whether expectations were met.

#### Summarise:

- Thank participants for active participation.
- Provide contact details of resource persons & training centre for future technical support