

# **Division of Blood Transfusion Services**

**Ministry of Health and Family Welfare**



# **Bedside Practices**

# Teaching Aims

You will learn about the different procedures carried out in the bed side like storing of blood sample, issue of blood and selection of blood & its components for transfusion etc .

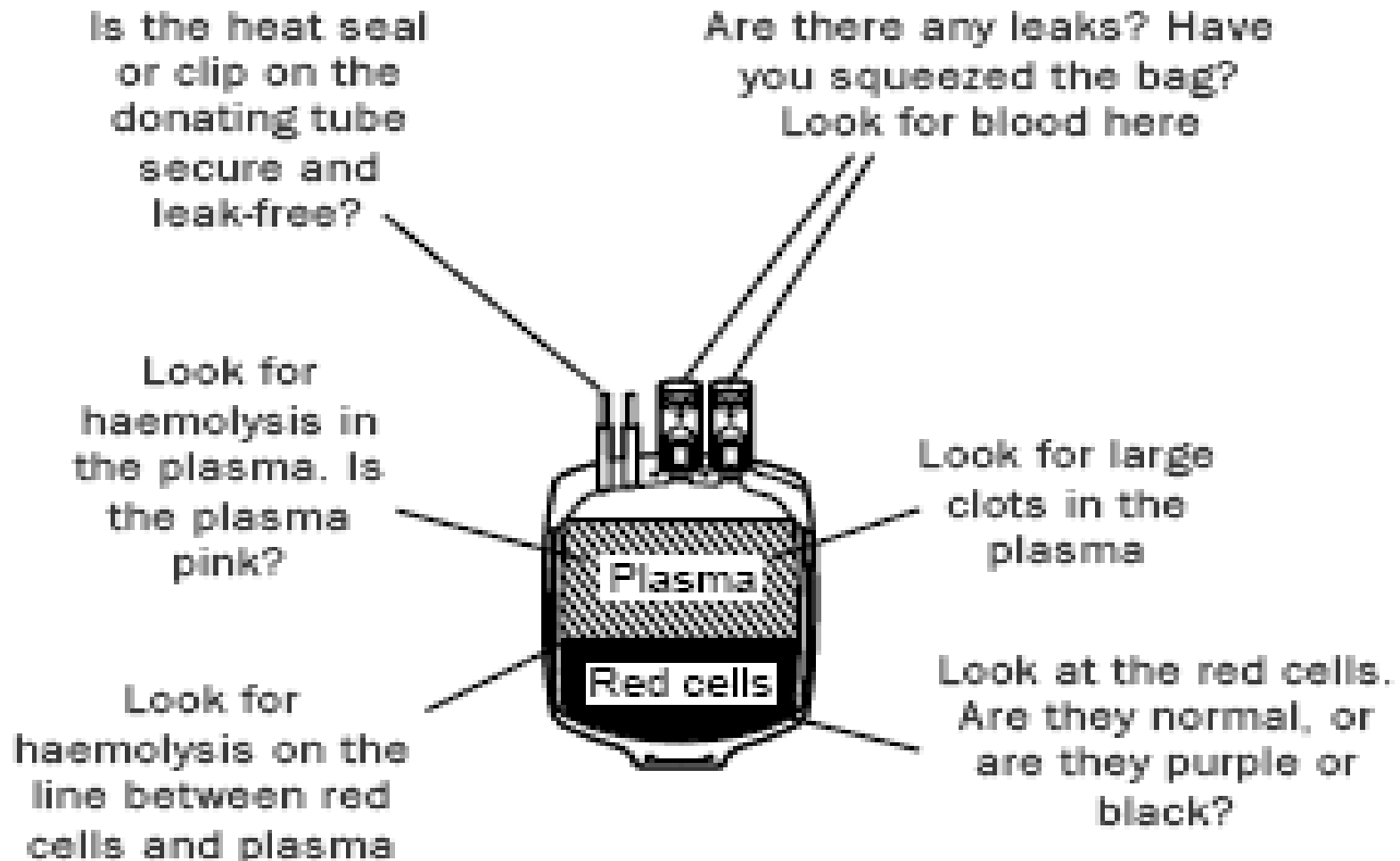


# Infusion Fluids

- Only isotonic saline is recommended to be used with blood components
- Do not prime the administration set with 5% Dextrose or Ringer Lactate solutions
- Dextrose will cause hemolysis of the red cells and calcium in Ringer Lactate will cause clot formation
- Before administering blood completely flush all the incompatible IV fluids and drugs or preferably Change the set



# Checking for Signs of Deterioration



# Pre-administration Checks

**Step 1**: Check the patients notes for-

- ✓ The component prescribed
- ✓ Any special requirements e.g. leuco depletion, warming, irradiation etc.
- ✓ Any pre-medication ordered e.g. diuretic

# Pre-administration checks -2

**Step 2:** Ask the patient for -

- ✓ Name
- ✓ Father's name / Surname

- Check these details against the details on the patient's wrist band/compatibility label
- Check the patients hospital case file number against the number on the compatibility report / label
- *Be extra vigilant when checking the identity of the unconscious / compromised patient*
- Two health care personals to identify the recipient.



# Pre-administration Checks -3

## COMPATIBILITY LABEL

<b>COMPATIBLE WITH</b>		
DONOR PACK No.		
SURNAME		
FORENAME		
HOSPITAL No.		
ADDRESS		
D.O.B.		
ABO	Rh	WARD
DERESERVE DATE		NUMBER OF UNITS ISSUED
STORE AT 4°C. ANY NHS TRUST		OF

SURNAME

FORENAME

HOSPITAL NUMBER

DATE OF BIRTH





# Pre-administration Checks - 4

**Step 3:** Check the details on the compatibility label against the details on the unit

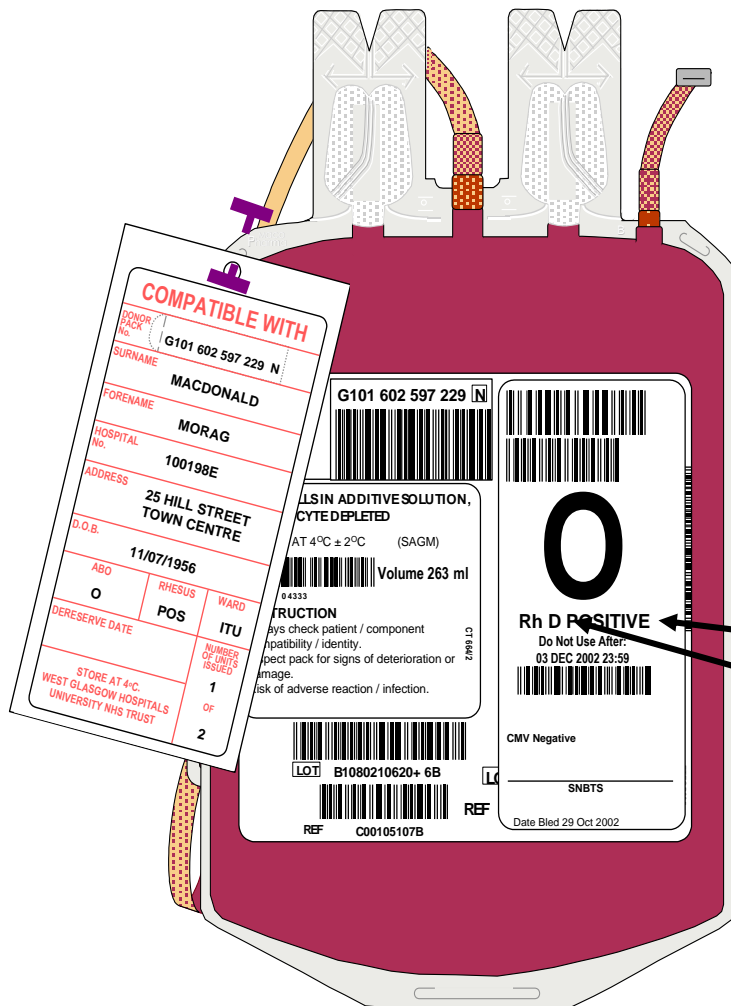
**Look for :**

- ✓ Blood group – It does not have to be identical but compatible as per the report
- ✓ Unique donation number – the number on the unit must be matched with that on the compatibility report
- ✓ Expiry date – Do not use any component beyond the expiry date or time
- ✓ Type of component – The label on the unit provides information on type and volume of component
- ✓ Signs of deterioration, leaks or clumping

Do not proceed if there is any discrepancy at any step and contact the blood bank immediately



# Pre-administration Checks – 5



DONOR  
COMPONENT  
NUMBER

BLOOD GROUP

RhD GROUP

**COMPATIBLE WITH**

DONOR  
PACK  
No.

SURNAME

FORENAME

HOSPITAL  
No.

ADDRESS

D.O.B.

ABO

Rh

WARD

DERESERVE DATE

NUMBER  
OF UNITS  
ISSUED

STORE AT 4°C.  
ANY NHS TRUST

OF

If there is ANY discrepancy - DO NOT transfuse

# Pre-administration Checks – 6

## Step 4:

- ✓ Check Patient's baseline vital signs – temperature, pulse, respiratory rate and BP
- ✓ Record these on the case file
- ✓ Document time of starting the transfusion

Blood bag allowed to warm above 10<sup>0</sup>C if not used BB cannot accept for reuse

# Transfusion Record Form

**ANY NHS HOSPITALS  
TRANSFUSION FORM**

PATIENT NAME: \_\_\_\_\_ UNIT No: \_\_\_\_\_  
D.O.B.: \_\_\_\_\_ WARD: \_\_\_\_\_ CONSULTANT: \_\_\_\_\_

		UNIT 1				UNIT 2				UNIT 3				UNIT 4							
DATE																					
TIME STARTED																					
TIME		HOURLY				HOURLY				HOURLY				HOURLY							
		B	1	2	3	4	B	1	2	3	4	B	1	2	3	4	B	1	2	3	4
TEMPERATURE	C°																				
	40																				
	39																				
	38																				
	37																				
PULSE BLOOD PRESSURE	36																				
	35																				
	210																				
	200																				
	190																				
	180																				
	170																				
	160																				
	150																				
	140																				
	130																				
120																					
110																					
100																					
90																					
80																					
70																					
60																					
50																					
40																					

**REMEMBER THE FINAL BEDSIDE CHECK FOR EVERY UNIT**

DONOR PACK NUMBER	DONOR PACK NUMBER	DONOR PACK NUMBER	DONOR PACK NUMBER
This unit has been checked against patients name band by Print Name:	This unit has been checked against patients name band by Print Name:	This unit has been checked against patients name band by Print Name:	This unit has been checked against patients name band by Print Name:
This unit has been prescribed by Print Name:	This unit has been prescribed by Print Name:	This unit has been prescribed by Print Name:	This unit has been prescribed by Print Name:

BLOOD TRANSFUSION SHOULD BE COMPLETED WITHIN 4 HOURS OF PUNCTURING PACK. IN THE EVENT OF A TRANSFUSION REACTION STOP TRANSFUSION CONTACT DOCTOR REFER TO PROTOCOL. MAINTAIN IV ACCESS WITH SALINE.

THIS DOCUMENT MUST BE RETAINED IN THE PATIENT HEALTH RECORD.



If there is ANY discrepancy - DO NOT transfuse



## Before Transfusion (contd...)

- Do not warm the blood by putting blood bags directly into unmonitored water bath or in direct contact with hot water bottle.
- **DO NOT** add any **MEDICATION** to the blood bag.
- Blood is to be administered through a 'BT set' (Blood Transfusion set) and ideally, transfusion should start within **30** minutes of the issue from blood bank.



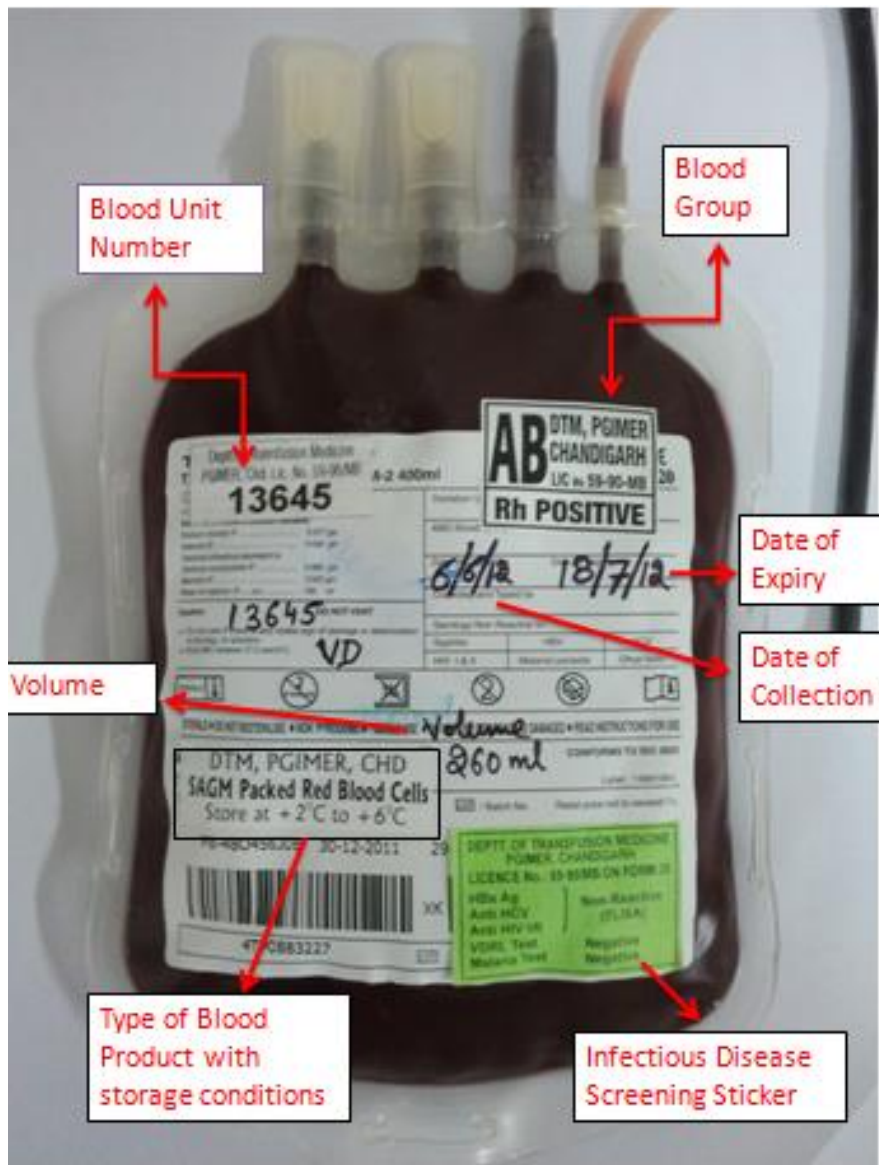
# Final Check of Blood Component Before Transfusion

- Visually check the blood unit for clots, unusual colour, and any leaks.
- **Patient Identity Check**
- **Checking blood immediately prior to the transfusion is the last opportunity to catch any errors.**





# Blood Bag Label



# Compatibility Label

Deptt. of Transfusion Medicine, PGIMER, Chandigarh

**AB Rh Positive**  
Whole Blood/Packed RBCs  
LICENCE NO. 59-90/MB

S.No. 2154  
X-matched for patient Narinder Singh  
C.R. No. 201202408510  
HOSP. PGI WARD MSW BED 12  
DONOR 13645  
Date of collection 6/6/12 Expiry 18/7/12  
Date of X-match 11/6/2012  
Date of issue 11/6/12 Time of issue 2:30 PM  
Constant storage at 4°C to 6°C is essential.  
Examine content carefully and check label and forms before use.  
Must use disposable sets with filter for transfusion.

Signature of Tech. *[Signature]*

## Compatibility Report

### BLOOD (WB/PRBC) REACTION FORM

Department of Transfusion Medicine, PGIMER, Chandigarh  
"To be retained in Patient's File"

S. No. 2154 Date 11/6/2012  
Name of Pt. Narinder Singh  
Age/Sex 34/M  
C. R. No. 201202408510  
Blood Group AB Rh +  
Hosp. PGI Wd. MSW Bed 12

➤ Physically the bag(s) shows no haemolysis, discolouration, clots or gas formation at the time of issue

➤ The blood bank is not responsible for deterioration in the quality after issue

➤ Once Opened, the blood bag should NOT be re-used

BAG No. (S)	BLOOD GROUP	PRBC/WB
1. <u>13645</u>	<u>AB+</u>	<u>SPRBC</u>
2.		
3.		
4.		
5.		

Signature of Technologist *[Signature]*

Blood is screened as per the rules under Drugs & Cosmetic's Act prevailing at the time

### BLOOD (WB/PRBC) REACTION FORM

Department of Transfusion Medicine, POST GRADUATE INSTITUTE OF MEDICAL EDUCATION AND RESEARCH, CHANDIGARH

S. No. \_\_\_\_\_ Date \_\_\_\_\_  
Name of Pt. \_\_\_\_\_  
C. R. No. \_\_\_\_\_ Group \_\_\_\_\_ Rh \_\_\_\_\_  
Hospital \_\_\_\_\_ Ward \_\_\_\_\_ Bed No. \_\_\_\_\_

Compatible with donor

- 
- 
- 
- 

Transfusion started at \_\_\_\_\_ completed at \_\_\_\_\_  
Rate of Transfusion \_\_\_\_\_ drops per minute  
Actual quantity of blood transfused \_\_\_\_\_ (ml)

#### CLINICAL OBSERVATION

General Condition	Pre Transfusion	During Transfusion	Post Transfusion
Pulse			
Resp			
Temp.			
B. P.			
Rigor			
Chills			
Myalgia			
Urticaria			
Other Observation			

Resident Doctor \_\_\_\_\_

IMPORTANT: Please read instructions overleaf before starting transfusion and in any case of transfusion reaction, inform blood bank resident immediately. Send blood bag, transfusion set, post-transfusion sample (EDTA)

# Types of Blood Components

- Whole Blood (WB)
- Packed Red blood cells (PRBC)
- Additive solution-PRBC
- Platelet Concentrate (PC)
- Fresh Frozen Plasma (FFP)
- Cryopoor Plasma (CPP)
- Cryoprecipitates (Cryo)
- Apheresis Platelets (SDAP)
- Granulocyte concentrates





# Initiating a Transfusion

- ✓ Wash hands
- ✓ Verify special needs e.g. filtration, pooling, warming blood
- ✓ After final patient identity check and baseline medical check at the bedside, start transfusion
- ✓ Ensure skin antisepsis prior to venepuncture
- ✓ Immediately before transfusion mix the unit of blood thoroughly by gentle inversion
- ✓ Use Set with Filters (170 micron) to remove blood clots and other debris
- ✓ Observe the patient closely for at least 15-30 minutes

# Starting Transfusion

## Before starting blood:

- Record baseline vital signs and assessment before starting each unit:

- Temperature
- Blood pressure
- Pulse
- Respiration
- Oxygen saturation if available
- Auscultation for patients at risk for overload (elderly, paediatric, cardiovascular disease)



# Learning Outcome

Enabled knowledge on different procedures carried out in the bed side like storing of blood sample, issue of blood and selection of blood & its components for transfusion etc .



NACO website: [www.naco.gov.in](http://www.naco.gov.in)

