

DONOR SCREENING AND VOLUNTARY BLOOD DONATION CAMPS

SOURCE OF BLOOD

- ➤ Blood Donor
- ➤ Value Blood Donor as VIP
- >Should meet defined Donor Selection criteria



BLOOD DONATION

Cornerstone of safe and adequate blood supply:

- Motivation
- Recruitment
- Retention of voluntary , non-remunerated blood donors

TYPES OF BLOOD

- 1. Voluntary Non Remunerated Donors
- 2. Replacement Donors
- 3. Allogeneic Donors
- 4. Autologous Blood Donors
- 5. Apheresis Donors
- 6. Directed Donors
- 7. Professional Donors



DONOR SELECTION

- ➤ Registration, Demographic information and Consent of the donor
- ➤ Medical history
- ➤ Physical examination
- ➤ Laboratory tests

STAGES OF BLOOD DONOR SCREENING

- 1. Pre-Donation information
- 2. Pre-Donation counselling
- 3. Donor Questionnaire and medical examination
- 4. Counselling during Blood Donation
- 5. Post-donation counselling



Donor Information

Donor be informed about blood donation and safety

Mandatory testing for HIV, HCV, HBV, Syphilis & Malaria

(he/she should indicate on the donor registration card, whether he/she wishes to know the report of the testing)

DONOR DEFERAL

Self Deferral

Temporary Deferral

Permanent Deferral



PRIVATE INTERVIEW

(High Risk Behaviour)

➤ History of multiple sexual partners or sex with Commercial Sex Workers- defer permanently

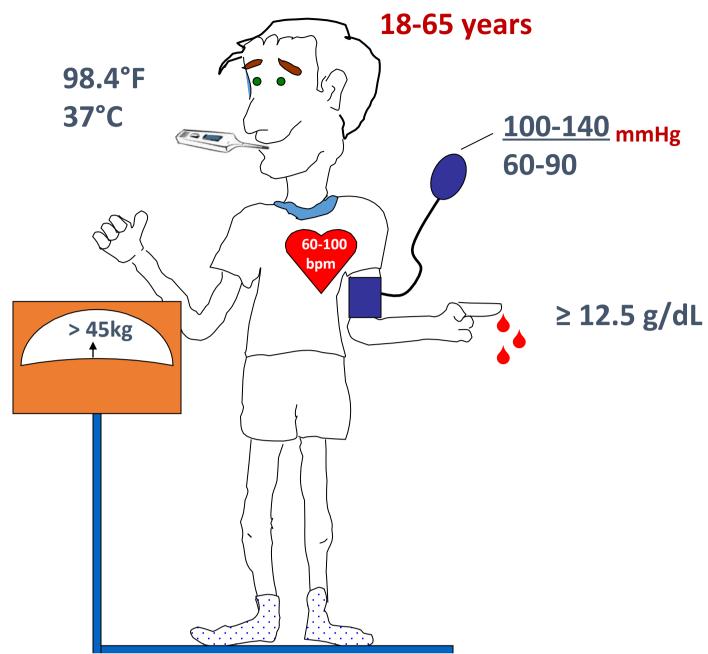
➤ High risk donors such as long route drivers, jail inmates, homosexuals, I/V drug abusers - defer permanently

INFORMED CONSENT

The donor has to sign the consent for blood donation on the Donor Questionnaire form



Criteria for selection of blood donors



Donor Selection Criteria (General)

S.No.	PARAMETER	CRITERIA
1.	Well Being	 Good health, mentally alert, physically fit Not an inmate of jail Not fasting Differently abled or those with communication or sight difficulty- valid consent
2.	Age (Years)	18-65, if First time donor<60Apheresis 18-60
3.	Weight (Kg)	 → 45 – 350ml → ≥ 55 – 450ml → Apheresis- >50kg
4.	Temperature	37°C /98.4 F(Afebrile)
5.	Pulse (Beats/ min)	60-100,Regular
6.	Blood Pressure(mm Hg)	Systolic =100-140 Diastolic = 60-90 with or w/o medications; No drug alteration in past 28 days



S.No.	PARAMETER	CRITERIA(General)
7.	Haemoglobin (g/dl)	≥ 12.5 & ≤ 17.5
8.	Respiration	> Free from acute respiratory disease
9.	Last Donation Interval	 For whole blood- 3 months for male & → 4 months for female → ≥ 48 hrs- platelet/ plasma apheresis → 28 days – if donated whole blood and candidate for plateletpheresis → 12 months – Bone Marrow Harvest → 6 months – Peripheral Blood Stem Cell
10.	Meal	Not Fasting; Last meal- Within 4hours
11.	Alcohol Intake	 Not regular heavy alcoholic No signs of alcohol intoxication Not taken heavy alcohol previous night

13

S.No.	PARAMETER	CRITERIA(General)
12.	Occupation	Air crew member,LRVD,strenuous worker -24 hours
13.	Travel and Residence	Not with H/O Endemic Area for diseases
14.	Donor Skin	Phlebotomy site free from scars
15.	Nonspecific illness- malaise, pain or headache	Defer till all symptoms subside and patient is afebrile



Donor Selection Criteria

S.No.	PARAMETER	CRITERIA (Physiological Status for Women)
16.	Pregnancy or recent delivery	Defer for 12 months after delivery
17.	Abortion	Defer for 6 months after abortion
18.	Breast feeding	Defer for total period of lactation
19.	Menstruation	Defer for the period of Menstruation
S.No.	PARAMETER	CRITERIA (Surgical Procedures)
20.	Major Surgery	Defer for 12 months after recovery
21.	Minor Surgery	Defer for 6 months after recovery
22.	CABG	Pemanently defer
23.	Oncosurgery	Pemanently defer
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24.	Received BT	12 months deferral
24.25.	Received BT Dental Surgery UA	12 months deferral 6 months deferral after recovery

S.No.	PARAMETER	CRITERIA (Liver Diseases and Hepatitis Infection)
27.	Hepatitis	Known Hepatitis B or C – Permanently defer Known A or E – Defer for 12 months Unknown Hepatitis-Permanently defer
28.	Spouse/ partner/ close contact of individual suffering from hepatitis	Defer for 12 months
29.	At risk for hepatitis- tattoos, acupuncture or any body piercing by self of for spouse/partner	Defer for 12 months
30.	Spouse partner receiving transfusion of blood/ components	Defer for 12 months
31.	Jaundice	Accept if attributed to h/o gall-stones, Rh disease, mononucleosis or in neonatal period
32.	Chronic Liver Disease/Liver Failure	Permanently defer



S.No.	PARAMETER	CRITERIA (HIV Infection /AIDS)
33.	At Risk for HIV Infection (Transgender, MSM,CSW,IVD,MSP)	Permanently defer
34.	Known HIV positive person or spouse/partner of PLHA (Person living with HIV AIDS)	Permanently defer
35.	Person with symptoms suggestive of AIDS	Permanently defer person having LAP, prolonged fever, diarrhea irrespective of HIV risk or status
S.No.	PARAMETER	CRITERIA (Sexually Transmitted Infections)
36.	Syphilis(Genital Sore or generalized skin rashes)	Permanently defer
37.	Gonorrhea	Permanently defer

S.No.	PARAMETER	CRITERIA (Other Infectious Diseases)
39.	H/o Measles, Mumps, Chicken Pox	Defer for 2 weeks following full recovery
40.	Malaria	Defer for 3 months following full recovery
41.	Typhoid	Defer for 12 months following full recovery
42.	Dengue/ Chikungunya	 Defer for 6 months following full recovery If visit to endemic area- 4 wks following return if no febrile illness
43.	Zika virus/ West Nile virus	 Defer for 4 months following full recovery If visit to endemic area- defer for 4 months following return if no febrile illness
44.	Tuberculosis	Permanent deferral(DCA)
45.	Leishmaniasis	Permanent deferral
46.	Leprosy	Permanent deferral



S.No.	PARAMETER	CRITERIA (Other Infections / Diseases/disorders)
47.	Conjunctivitis	Defer for the period of illness and continuation of local medication
48.	Osteomyelitis	Defer for 2 years following completion of treatment and cure
49.	Autoimmune disorders like SLE,Scleroderma,Dermatomyositis, Ankylosing spondylitis or severe RA	Permanently Defer
50.	Malignancy	Permanently Defer
51.	Severe Allergic Disorders	Permanently Defer

S.No.	PARAMETER	CRITERIA (Hematological Conditions)
52.	Polycythemia vera	Permanently Defer
53.	Bleeding disorders and unexplained bleeding tendency	Permanently Defer
54.	Haemoglobinopathies and red cell enzyme deficiencies with known h/o hemolysis	Permanently Defer
55.	Donors with unexplained delayed fainting and/or associated with injury or two consecutive faints following a donation	Permanently Defer
56.	Recipients of Organ, Stem cell and Tissue transplants	Permanently Defer



S.No.	PARAMETER	CRITERIA (Respiratory (Lung) Diseases)
57.	Cold , flu,cough,sore throat or Acute Sinusitis	Defer until all symptoms subside and donor is afebrile
58.	Chronic Sinusitis	Accept unless on antibiotics
59.	Asthmatic attack	Permanently Defer
60.	Asthmatics on steroids	Permanently Defer
S.No.	PARAMETER	CRITERIA (Digestive System Diseases)
61.	Diarrhea (if in preceding week especially if associated with fever	Defer for 2 weeks after complete recovery and last dose of medication
62.	GI endoscopy	Defer for 12 months
63.	Acid peptic disease	Accept if with acid reflux, mild esophageal reflux, GERD, mild hiatus hernia
		Permanently Defer if symptomatic gastric ulcer or with recurrent bleed

S.No.	PARAMETER	CRITERIA (Cardiovascular Diseases)
64.	Any active symptom (chest pain, shortness of breath, swelling on feet)	Permanently Defer
65.	Myocardial infarction (Heart attack)	Permanently Defer
66.	Cardiac medication (Digitalis, Nitroglycerine)	Permanently Defer
67.	Hypertensive heart disease	Permanently Defer
68.	Coronary artery disease	Permanently Defer
69.	Angina Pectoris	Permanently Defer
70.	Rheumatic Heart disease with residual change	Permanently Defer



S.No.	PARAMETER	CRITERIA (Kidney disease)
71.	Acute infection of Kidney (pyelonephritis)	Defer for 6 months after complete recovery and last dose of medication
72.	Acute infection of Bladder(cystitis)/UTI	Defer for 2 weeks after complete recovery and last dose of medication
73.	Chronic infection of kidney/kidney disease/Renal failure	Permanently Defer
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S.No.	PARAMETER	CRITERIA (CNS /Psychiatric Diseases)
S.No. 74.		
	PARAMETER Convulsions and epilepsy,	(CNS /Psychiatric Diseases)

S.No.	PARAMETER	CRITERIA (Endocrine Disorders)	
77.	Diabetes Mellitus	Accept if DM is well controlled by diet or oral hypoglycemic medication, with no h/o orthostatic hypotension, no h/o infection, neuropathy or vascular disease(e.g. peripheral ulceration) Defer if medication altered/ dosage adjusted in last 4 weeks	
78.	Multiorgan Involvement as complication of DM	Permanently Defer	
79.	Thyroid disorders	Accept Benign thyroid disorders if Euthyroid (like Asymptomatic goiter, h/o Viral Thyroiditis, Auto-immune hypothyroidism) Defer if thyroid status is under investigation or unknown	
80.	Thyrotoxicosis due to Grave's disease, Hypo/Hyper thyroid, H/O Malignant Thyroid tumor	Permanently Defer	



S.No.	PARAMETER	CRITERIA (Medications)
81.	Oral contraceptives, Analgesics, Vitamins, Mild sedative and tranquillizers, Allopurinol, Cholesterol lowering medications	Accept
82.	Salicylates (Aspirin), other NSAIDs	Defer for 3 days if blood is to be used for platelet preparation
83.	Ketokonazole, Antihelminthic drugs including Mebendazole	Defer for 7 days after last dose
84.	Antibiotics, Ticlopidine, Clopidogrel, Piroxicam, Dipyridamole	Defer for 2 weeks after last dose
85.	Etrenitate, Acitretin or Isotretinoin (For Acne), Finasteride (For Benign Prostatic Hyperplasia) Dutasteride (For Benign Prostatic Hyperplasia)	 Defer for 1 month after last dose Defer for 6 months after last dose
86.	Radioactive contrast material	Defer 8 weeks

S.No.	PARAMETER	CRITERIA (Medications)
87.	Any medication of unknown nature	Defer till details are available
88.	Oral anti-Diabetic drugs	Accept if there is no alteration of dose in last 4 weeks
89.	Insulin	Permanently Defer
90.	Anti-arrhythmic, Anti-Convulsions, Anti-coagulant, Anti-thyroid drugs, Cytotoxic drugs, Cardiac failure drugs (Digitalis)	Permanently Defer
91.	Cortisone	Defer for 7 days after the last dose(DCA)



S.No.	PARAMETER	CRITERIA (Vaccination and Inoculation)
92.	Non live vaccines and Toxoid- Typhoid, Cholera, Papilloma-virus, Influenza, Meningococcal, Pertussis, Pneumococcal, Polio injectable, Diphtheria, Tetanus, Plague	Defer for 14 days(2weeks)
93.	Live attenuated vaccines- Polio (oral), Measles (Rubella), Mumps, Yellow fever, Japanese Encephalitis, Influenza, Typhoid, Cholera, Hepatitis A	Defer for 28 days(4 weeks)
94.	Anti-Tetanus serum, anti-venom serum, anti- diphtheria serum, anti-Gas Gangrene serum	Defer for 28 days(4 weeks)
95.	Anti-rabies vaccination following animal bite, Hepatitis B immunoglobulin, Immunoglobulins	Defer for 1 year

Brief Physical examination

- ➤ General Examination
- **≻**Weight
- ➤ Visual inspection of antecubital fossa
- **≻**Pulse
- ➤ Blood Pressure



Laboratory Testing

- Hb estimation
- Blood Grouping

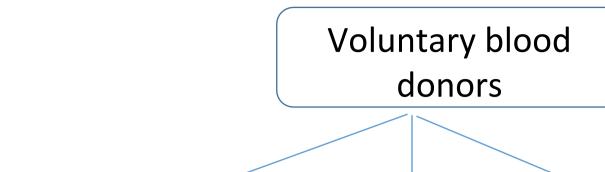
VOLUNTARY BLOOD DONATION CAMPSDonation Camp

Aim:

- To curb the scarcity of blood
- To ensure availability of safe quality blood and other blood components round the clock and throughout the year
- Actively encourage voluntary blood donation and gradually eliminate professional donors
- > Educating community on beneficial aspects of blood donation and harmful effect of collecting blood from paid donors
- ➤ Promote AIDS awareness and education to general

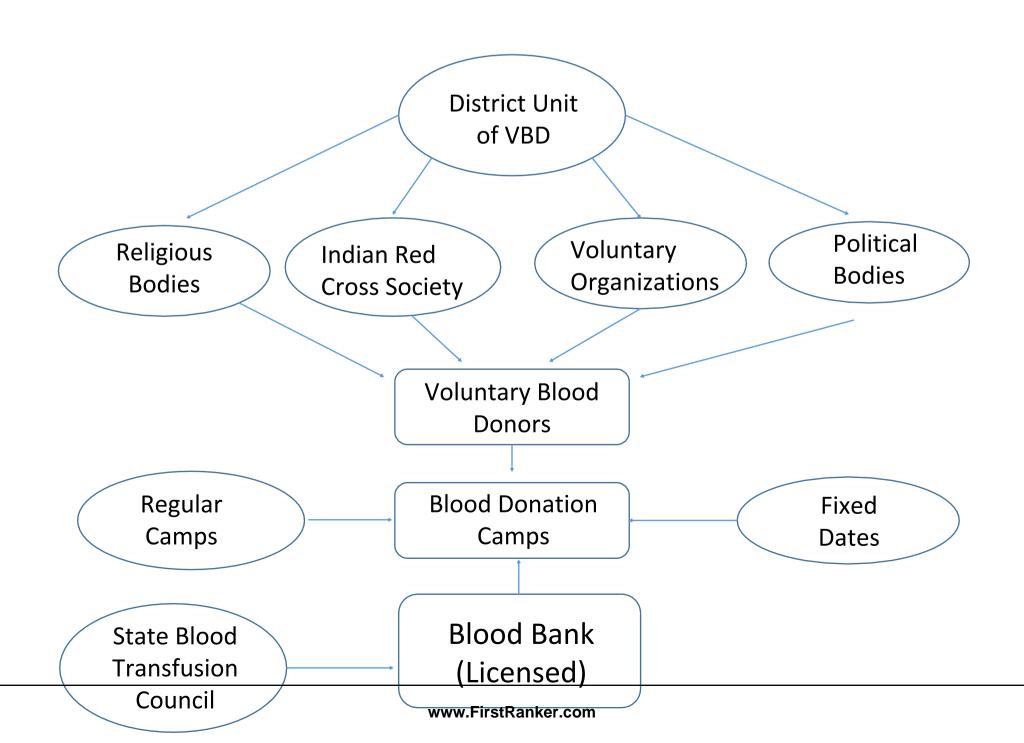


Valorementary design of the property aid, non-remunerated blood donation



New voluntary donor (Never donated) Lapsed voluntary
Donor
(<3 times
donation, no
donation previous
year)

Regular voluntary donor (3 times donation, last donation prev. yr, once a yr donation)





Estimation of Requirement of Blood

Four Approaches

- In relation to hospital beds
- In relation to total population
- In relation to medical facility available in the region
- In relation to past blood usage

Source- WHO-BSI/GDBS 2007

Blood donation in camps

Advantages:

- ➤ Voluntary blood donations
- ➤ Healthy pool of donors
- ➤ Convenient to donors
- >Friendly atmosphere
- > Retention of regular donors

Disadvantages:

- ➤ Increased tendency of donor reactions
- ➤ Inconvenience to blood bank team if outdoors



Sites for Blood Donation Camp Educational institutions

- ➤Offices ,Banks
- ➤ Sports associations, fitness club
- > Religious associations

Not in areas with predominantly high risk population

ORGANIZERS

- 1. Licensed designated Regional Blood Transfusion Centre
- Licensed Government Blood Centre
- 3. Indian Red Cross Society
- Licenced Blood Centre run by registered voluntary or charitable organizations recognized by State or Union Territory Blood Transfusion Council (BTC)

Source: DGHS



Organisations involved in holding a blood donation camp

Involvement of following partners is essential to hold a blood donation camp:

- 1. State blood transfusion council
- 2. Blood Centre
- 3. Blood donor organisation/NGO
- 4. Organisers/ Sponsors
- 5. Donor motivators/ social workers

NACO 2007: Voluntary Blood Donation Programme

Designated Regional Blood Transfusion Centre

- Approved and designated by a BTC constituted by a State Government
- Licensed and approved by the Licensing Authority and Central Licence Approving Authority
- To collect, process and distribute blood and its components
- To fulfill needs of the region

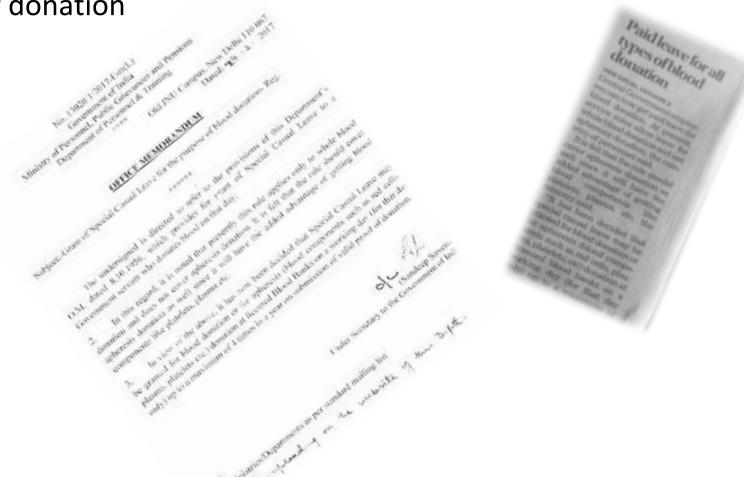


Special Casual Leave

• Grant of special casual leave to govt. servant who donates blood on that day

Applies to maximum four times a year on submission of valid

proof of donation

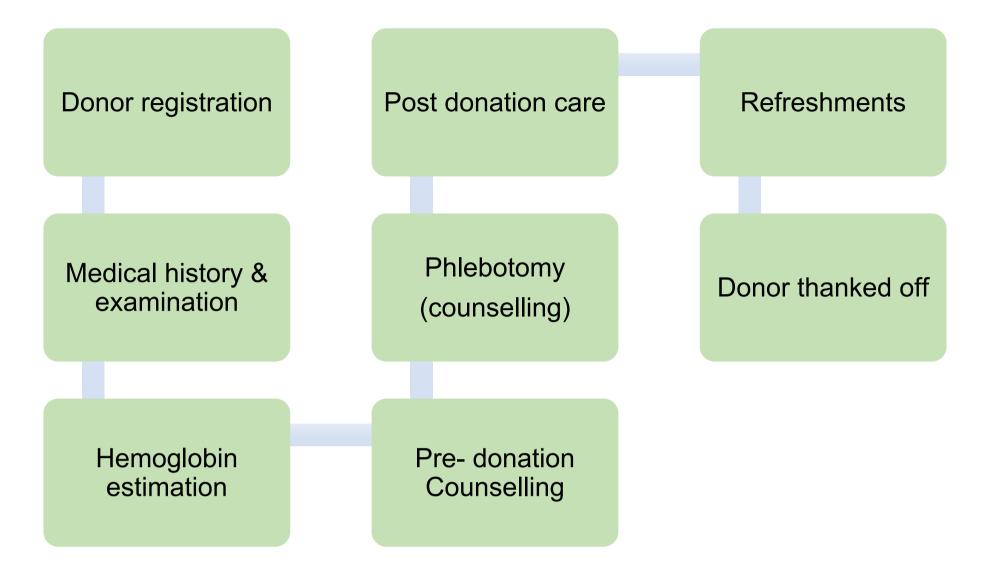


Phases of Blood Donation Camp 1. Pre- camp phase

- 2. Camp phase
- 3. Post camp phase



Camp process flow



Pre-camp phase

- ➤ Blood Banks provide requirement to Blood donor organisation
- ➤ Blood donor organisation co-ordinates with various schools / colleges/ universities, industries, religious bodies, etc.
- ➤ Date, time and venue are fixed with organisers
- ➤ Number of donations required is discussed with organisers
- ➤ Blood Donor Organisation liaises with Blood Centre and camp givers about a mutually convenient date
- ➤ Blood Bank sends written information to SBTC



- ➤ Blood Bank official visits site of venue to inspect its suitability for the camp A checklist may be provided to organiser
- Few days before the camp, NGO/ Social Worker/ Donor Motivator can arrange a talk on importance of voluntary blood donation to the potential donors
- ➤ IEC materials on the subject should be provided to organisers to be displayed in their working premises

Camp site inspection checklist

Shall meet following criteria so as to allow proper operation, maintenance and cleaning:

- ➤ Sufficient area
- ➤ Hygienic location
- Continuous and uninterrupted electrical supply for equipments
- >Provision for coolers or heaters depending on weather
- ➤ Adequate lighting for all the required activities
- >Furniture and equipment arranged within the available place



Contd....

- ➤ Reliable communication system to the central office of the Controller/ Organiser of the camp
- > Facilities for medical examination of the donors
- ➤ Clean drinking water supply for donors
- > Refreshment facilities for donors and staff
- ➤ Hand-washing facilities for staff
- ➤ Proper disposal of waste

Written information of camp >E-Mail to SBTC

- ➤ Letter to Medical Superintendent(MS)
- >Letter to PRO for vehicle



Vehicle used for transportation:

- ➤ Seating capacity of 8-10 persons
- ➤ Provision for carriage of donation goods including facilities to conduct a blood donation camp

Personnel Required

- ➤ One Medical Officer and two nurses or phlebotomists for managing 6-8 donor tables
- >Two medico social workers
- >Three blood bank technicians
- ➤ Two attendants



Equipment Checklist

For donor screening:

- ➤ Donor questionnaire, pens
- ➤ BP apparatus
- >Stethoscope
- ➤ Weighing device for donors
- ➤ Portable Hb meter/copper sulphate.
- ➤ Lancets, cuvettes, cotton swabs, gloves

For blood collection:

- ➤ Donor couches
- ➤ Blood collection monitor
- ➤ Portable tube sealer
- ➤ Plain and EDTA vials
- >Test tube stand
- ➤ Screens
- ➤ Bedsheet, blankets
- ➤Gloves, spirit, betadine, cotton swabs, adhesive tape, guaze, band-aids



- ➤ Blood bags
- ➤ Stripper for blood tubings
- ➤ Transport box with ice packs
- ➤ Color coded biomedical waste bags
- ➤ Emergency medical kit
- ➤ Donor cards, certificates

For donor refreshment:

- **≻**Juices
- **≻**Biscuits
- **≻**Water



Camp phase

- ➤ The blood bank team arrives at the venue of camp well before the time given to donors
- ➤ Supervise venue for adequate facilities like space, furniture, heaters/coolers
- ➤ Inspect pre-donation, donation and post-donation areas as per standards
- ➤ Liaise with the Organiser and Voluntary Donor Organisation
- >IEC materials and banners should be displayed everywhere

- ➤ Arrange for inauguration of camp
- >The camp should be started on time
- Screening and medical examination of blood donors by Medical personnel
- ➤ Over-crowding of the area should be prohibited
- ➤ Comfortable and adequate sitting arrangement for blood donors



- ➤ Bleeding area should have adequate lighting and proper ventilation.
- ➤ Bleeding procedures should be as per standards.
- >Provision for donor refreshment.
- ➤ Provision for management of donor reactions.
- ➤ Area should be cordoned off from other persons.
- ➤ Camp should be completed at the stipulated time.

Waste disposal in camps

Type of waste	Disposal	
Cotton swabs, gauge	Yellow bins	
Lancets, blood bag needles	White sharp container	
Cuvettes	1% Hypochlorite	
Blood bag tubings	Yellow bins	
Gloves	Red bins	
Paper, wrappers, empty juice packets	Black bins	



- ➤ Before leaving the camp premise, Blood Donors and Organisers should be appreciated for their gesture.
- The blood bank team should reach their destination in time. **Incentives**
 - ➤ Incentives like pins, badges and plaques for specified number of donations help in repeat donations
 ➤ Other incentives or awards, simple and attractive of minimal commercial value, are useful in retaining donors

Post camp phase

- ➤ Medical Director must send letters of appreciation to the Organiser for arranging the camp.
- They should be encouraged to organize similar camps on a regular basis.
- ➤ Blood Donors of the camp should receive thank-you letters and blood group cards either individually or through their particular organization.
- ➤ Constant touch with blood donors to be maintained through birthday cards, anniversary cards, etc.



Government Blood Centre and Indian Red Cross Society shall intimate:

- within a period of seven days
- venue where blood camp was held
- >details of group wise blood units collected
- ➤ to the licensing Authority and Central Licence Approving Authority
- Monthly details of camp sent to NACO alongwith other details of blood bank

Special ceremonies

- Annual award ceremonies: to acknowledge and congratulate people who have donated blood many times or assisted in promoting the voluntary donations.
- Widely publicize and invite prominent citizens to address the donors and organizations/ institutions for their valuable and outstanding service to the community.
- Donors, recruiters, institutions and organizations: cups, trophies and shields for their contributions in voluntary blood donations.



- ➤ Annual award ceremonies held by our department on 14th June and 1st October
- >Poster compatition production hatak, appreciation to regular donors, appreciation to camp organizers
 - > Should be decided in the start of year
 - Camps should be evenly distributed through out the year
 - ➤ Particular months of expected increased demand to be taken care of

Mass blood donation camps

- Very large number of donors
- Should not be encouraged
- ➤ Increased wastage of units
- ➤Instead 3-4 blood bank teams can be called at a place if number of donors is high
- ➤NACO has passed an addendum that maximum donation units from a camp should not exceed 500



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