

Recommendations for Blood Centres Regarding the Novel Coronavirus Disease (COVID-19) Outbreak in respect of donations

Blood Centres, world over, are dependent on voluntary blood donation from healthy individuals to meet their blood supplies. In light of the COVID-19, there are several national and global reports of apprehensions among potential blood donors and donor organizations with respect to risks of contracting the infection through blood donation camps and visiting the blood centre to donate blood. The social distancing being advocated for preventing an individual from contracting COVID-19 is also being interpreted to not congregate for blood donation opportunities.

If people do not turn up to donate at blood centres or camp locations, there is a likelihood of shortfall in blood supplies, which may be detrimental to those who are in urgent need of blood and blood components, like thalassaemics, persons with severe anaemia, instances of severe blood loss, road traffic accidents, post partum haemorrhage etc.

To provide safe blood to community during the COVID Pandemic, the blood bank has to motivate and recruit the voluntary non-remunerated blood donors include mass blood donor who donate blood out of altruism. Voluntary blood donation can be achieved by arranging camps in a particular place, society or particular day when people have gathered. The projection should not exceed the requirement and blood collection should be done in a hygienic and safe manner.

1. Blood Donation

- Arrange small group donations and make donors donate in different time periods to avoid gathering. Minimize the number of accompanying persons.
- Every blood donor entering the blood donation site should wear a mask and be provided with hand disinfectant.
- Retain minimum one meter distance between blood collection chairs.
- The reusable squeeze ball should be covered with disposable pad and sanitized frequently.
- Blood centre may uptake contingency blood donor recruitment or encourage recruitment through SMS and phone calls.
- Blood centre may make full use of official websites, social media, LED screens and outdoor exhibition boards at all donation sites to publicize knowledge of voluntary blood donation as well as that of prevention measures of COVID-19 so as to dispel people's doubts and worries.
- A check list of the material as per routine SOP is filled up by in-charge technician of the camp.
- It is the responsibility of the camp coordinator to co-ordinate with camp organizer before the blood donation camp telephonically and sees the requirements needed for that. The organizers are made to fill up a scan copy of a form which describes the requirement in the camp and send through mail.

- On the day of camp he/she should check the list of materials required for the camp and should see the proper loading in the van of the material.
- The donation couches and other material should be kept at the place 30 minutes before the starting of the camp.

PREMISES & SAFETY MEASURES:

- Floor should be clean and swabbed with detergent solution 30 minutes before donation.
- Arrangement for hand washing.
- Provision for adequate soap/hand sanitizer and water.
- Seating arrangement for maximum 4 people in donor waiting area and donor refreshment area maintaining social distancing norms strictly.
- Social Distancing measures should be followed in the blood donation site like,
 - Physical distancing of one meter between the individuals,
 - Restriction of social norms of hand shaking and hugging,
 - Hand washing protocols, protocols for maintaining the proper cleanliness of the equipment used during the blood donation,
 - Measures to reduce the overcrowding,
 - Managing the blood donation couches such that one meter distance is maintained between the two couches of blood donation etc.
- Infection prevention and control measures should be under taken by the staff and as well as the blood donors like,
 - Blood centres and camp organizers should educate the staff and donors for the same and provide facilities like running water, soap, hand sanitizers, colour coded dustbins etc.
 - Hand hygiene: Hand washing with soap and water or Hand rubbing with an alcohol-based preparation is the preferred method.
 - Cough etiquette: appropriate for all modes of transmission.
 - Avoid close contact with confirmed or suspected case of coronavirus disease.
 - Stay at home or self defer if staff/donor is unwell or have contact with someone confirmed for COVID-19.
 - Safe disposal of used gloves, masks, caps and other soiled material.

MOBILE VAN:

- Mobile van should be fumigated after each blood donation camp.
- Maximum 2 donors are allowed for donation in mobile van.
- Arrangement for hand washing.
- Provision for adequate soap/hand sanitizer and water.
- Seating arrangement for maximum 4 person in donor waiting area and donor refreshment area outside the van, maintaining social distancing norms strictly

DONOR:

- Donor entering the blood donation site should wear a mask
- To wash hand thoroughly and sanitize with hand sanitizer
- To avoid touching other things in the donation area if not required.
- Always maintain a distance of 1 meter from another person at the donation site.
- Donor registration form to be filled properly.

DONOR CONSENT

After information and counselling about criteria for selection, donors should consent in writing to the terms of donation, including the use of the donated blood and the extent of testing for transfusion transmitted diseases. Donors should be explained about the possibility of adverse donor reaction. Donor should agree and to sign, and promise to inform the blood centre within 14 days after donation if they have symptoms of COVID-19, such as fever, cough, fatigue and shortness of breath, or been quarantined.

Hb ESTIMATION

Hb estimation of donor is done by technician.

MEDICAL OFFICER

- To follow the donor screening as per recent guidelines of NACO/NBTC.
- To wear cap, mask & apron.
- To clean hands at regular interval.
- **Exclusion of at-risk donors to maintain safety:** - Based on the history of the exposure of blood donor to the Coronavirus (SARS-CoV-2), following are the deferral criteria that should be applied while selecting the donor for blood donation.
 - **Travel history:** - Individuals should be deferred from donating blood for 28 days after the date of departure from a country with COVID-19 transmission in the community and areas as notified by Ministry of Health and Family Welfare time to time.
 - **Contact history:** - Individuals should be deferred from donating blood for 28 days with the last possible close contact exposure to a person who is confirmed/suspected case of COVID-19 including those under quarantine.
 - **Confirmed case:** - Individuals should be deferred from donating blood for 28 days till there is complete recovery from the disease including radiological and virological clearance.

PHLEBOTOMIST

- To wear cap, mask, apron.

- To wear gloves & dispose them at regular interval.
- To wash/sanitize hands regularly.
- To maintain the social distancing norms with the donors.
- Always use smiley balls & tourniquet after proper cleaning.
- To clean phlebotomy site properly as per protocol
- Uncover the sterile needle and perform venepuncture immediately using aseptic procedure and press the start button of blood collection monitor.
- Seal tube attached to the bag into 4-5 segments with di-electric tube sealer. Discard the needle in a puncture proof container with hypochlorite solution.
- Collected blood bags are kept immediately in the insulation containers. Blood bag should not be kept directly in contact with ice packs. Bags should be transported to the blood bank in blood transport van. During transportation in the van, the blood bags are kept at 20-24 C if components are to be separated; otherwise all bags are kept at 2-6 C. The camp in charge will check the proper cold chain maintenance during transportation to the blood bank.
- The donor should remain on the couch for 8-10 minutes under the observation of staff.
- Check the arm and apply bandage after bleeding stops.
- Then the donor is allowed to sit up and go for refreshment.
- The donors are given the blood donation cards/certificates at the site of camps and the final blood grouping and TTI report is sent to them by post.
- Donor is thanked.
- After completion of blood donation camp, fumigate the mobile van.

POST DONATION CARE AND NOTIFICATION FROM BLOOD DONORS

- Post donation care is to be ensured for every donor donating blood at the blood centre or in outdoor locations as per standard of care. In the present context:

Blood donor related:

- Blood centre should provide printed instructions to educate blood donors to agree and sign, and promise to inform the blood centre within 14 days after donation if they have symptoms of COVID-19, such as fever, cough, fatigue and shortness of breath, or been quarantined.
- If a blood donor after donation reports the blood centre about his/her COVID-19 like symptoms or that he/she has been quarantined, it is suggested:
 - to quarantine his/her blood and blood components in the bank;
 - to arrange a quarantine of the staff exposed to the donor;
 - to follow up on donor after quarantine, and release his/her blood and blood components if he/she is excluded from infection
- If a donor reports his/her diagnosis of COVID-19, it is suggested:

- to confidentially dispose of his/her blood and blood components;
- to arrange a quarantine of the staff exposed to the donor
- If a donor reports his/her symptoms or diagnosis of COVID-19 when his/her blood and blood components have been transfused, immediately inform the related hospital and report to health authorities.

Blood and blood component related:-

- The unutilized whole blood or blood components collected from such individuals as under and above should be recalled and discarded.

2. Balance of Blood Supply and Demand

- Coordination with other blood centres should be there and the policy of bulk transfer may be used at this time.
- Emergency blood donation camp may be arranged (20-30 persons)
- Guidelines on appropriate clinical use of blood and blood components, In situations where the normal sufficiency or safety of the blood supply may be compromised.
- Only giving blood and components when absolutely necessary will help to both safeguard supplies and protect recipients from unnecessary exposure to a potentially infectious clinical product.

3. Disinfection of Premises/Blood Collection Van

- Minimize the use of central air conditioning. If it is necessary to use, switch to fresh air mode. Disinfect air outlets at densely populated places after work each day
- Ventilate the air at least twice a day for not less than 30minutes each time.
- Wipe seats, floors, handrails, workbenches, and instruments with chlorine disinfectant or 75% alcohol before and after work.
- Enhance the disinfection of blood delivery vehicles. Disinfect after each trip, especially the steering wheels, door handles and seats.
- Enhance the disinfection of blood transport boxes. Disinfect both the inside and the outside of the boxes after use.

4. Role of Haemovigilance

- Haemovigilance has an important role to play. Since a National Haemovigilance Program is in place in National Institute of Biologicals, it should continue to capture and analyse any adverse events, which are associated with blood and blood component transfusion, including post donation instances of COVID-19.
- All possible cases post donation and post transfusion infections should be reported to HvPI of NIB with copies to respective SBTC and State FDA and properly investigated.

REFERENCES

1. Model standard operating procedures for blood transfusion service, WHO, New Delhi 2002
2. Technical Manual of American Association of Blood Banks ,18th edition, 2014
3. Drugs & Cosmetics Act, 1940, schedule F, 1998
4. Director General of Health Services, 2nd edition, 2003.
5. Ministry of Health and Family Welfare, Government of India, New Delhi
6. NBTC guidance to blood transfusion services in India in light of Covid-19 Pandemic. Ref. D.O. No: S-12016/56/2020- NACO (BS)/ 25th March 2020.