

ASIAN ASSOCIATION OF TRANSFUSION MEDICINE

AIDE-MEMOIRE COVID-19

For Members, Blood Banks, Transfusion Services and Hospitals

Blood transfusion is an essential part of patient care. When used correctly, it improves health and saves lives However, blood transfusion carries a potential risk of acute or delayed complications and transfusion-transmitted infections.

The risk of transmission of SARS-CoV-2 through blood and components has not been determined. However, respiratory viruses have never been reported to be transmitted by blood transfusion, including coronaviruses like SARS-CoV and MERS-CoV.

Current donor selection and screening measures should also exclude any individual who is not in good health or with symptoms and signs of fever or respiratory disease – common cold, flu or influenza over the past 14 days. Although there are uncertainties regarding the presence of viraemia in asymptomatic individuals (e.g., during incubation period, asymptomatic infection or after symptom resolution), any potential risk of transmission from blood collected from such individuals is theoretical.

In the absence of demonstrable transmission through transfusion, any actions taken to contain risk are purely precautionary. Available options include donor education, self-deferral or deferral of at-risk donors, quarantine of blood components, laboratory testing, and pathogen reduction

Although potential donors are generally in good health, it is possible that an infected donor who is asymptomatic, pre-symptomatic or with very mild symptoms may infect other donors and staff during blood donation. Strategies taken to contain this risk should be proportionate and evidence-based, and should follow the public health measures taken in the country.

The number of potential blood donors available may decrease due to infection in potential donors, their families and contacts, restrictions on movement including public health requirements for quarantine, and the unwillingness of some individuals to donate through fear of being infected by being in close contact with others. With widespread community transmission, healthy uninfected potential donors are also less available to donate blood, due to closure of organizations, workplaces, universities, transport restrictions, community quarantine and other social distancing measures.

Words of advice

- Use only evidenced information and avoid spreading fear and rumours to public and hospitals.
- Keep an open regular contact with community, Health Authorities and hospitals.
- Observe strict hygiene and asepsis personnel, donors, visitors; door handles, work surfaces, furniture, toilets and equipment, use UV light.
- In close contact with clinicians, manage blood stock and consumption.
- Advise clinicians to transfuse only when absolutely necessary.
- Observe social distance when in contact with public, donors and others
- Have protocols and materials ready in case of possible contamination of blood, secretions or vomit from donors or suspected individuals (staff_visitors)
- Use common sense and exchange information with public, peers and Health Authorities.

Checklist

Prerequisites

- □ National Health programme.
- ☐ Government commitment.
- Quality system management.
- ☐ Staff education and specific materials preparedness.
- ☐ Sufficient & competent staff.
- ☐ Participating Public Health institutions and laboratories.

Community contacts

- ☐ Active COVID-19 information centre.
- Avoid gathering large numbers of potential donors.
- ☐ Spread call up, ask donors to come individually.
- ☐ Discourage potential donors symptomatic common cold, flu or influenza (last 28 days), to attend, but ask for keeping in contact.

Blood collection

- ☐ At entrance have potential donors disinfect hands and measure temperature (triage).
- ☐ Questionnaire emphasis on symptoms of common cold, flu or influenza, and recent (past 28 days) contact with people with similar symptoms, having been diagnosed or in contact with COVID-19 infected people.
- ☐ Inform potential donors with a risk for infection to consult their family doctor.

Monitoring and evaluation

- Ask active donors to report on symptoms within 48 hours after donation; collected blood to be discarded.
- ☐ Staff developing symptoms over the last 28 days or having been in contact with infected people contact Medical Director.
- ☐ Visitors contact blood centre through social media before visiting.

Remember – the need of blood is continuous. The only source is a healthy voluntary donor donating in a healthy environment

Asian Association of Transfusion Medicine – COVID-19 Prevention in Transfusion Medicine

Key Elements

Blood transfusion is an essential part of patient care. The national blood system is responsible for ensuring the provision of an adequate supply of safe blood for all patients who need it.

Government commitment and support should be encouraged and a national policy on safe blood provision in emergencies developed and promoted.

The national health programme should include the provision of knowledge and skills for health-care workers involved in this field and must be able to cope with emergencies.

The COVID-19 outbreak is a significant public health threat and emergency. Causative agent (SARS-CoV-2) is primarily a respiratory virus. However, it has the potential to affect the blood supply, compromise the safety of the blood supply, and adversely impact blood system activities. Blood services should therefore take steps to assess, plan and

respond appropriately and proportionately to these threats.

The risk of transmission through blood and components is unknown at this time, but is likely to be very low. On the other hand, experience with outbreaks involving similar coronaviruses such as SARS and MERS suggests that there will be significant impact on blood supply through reduced blood donation.

Quality systems management in all areas of the blood service vein-to-vein are required to ensure that standards are maintained and improved, and that documented records of all activities are kept to trace and provide an evidence base.

The situation must be closely monitored and risk assessments reviewed regularly, and immediately if the situation changes significantly. Blood services need to be prepared to move quickly in response to changes, when blood sufficiency is most likely to be affected.

Any measures taken must be proportionate to the situation and aligned with other public health measures in the country.

A national approach should be adopted so that proposed actions are accommodated within the range of national actions identified by national risk assessment.

The potential consequences in terms of public and political confidence in the response to the outbreak should be considered.

The Blood Service must ensure that its emergency response and pandemic plans are prepared, updated and activated when necessary.

The risk assessment and response plans for the blood supply and clinical use should be integrated with national risk assessment and emergency response plans.

Involvement of the government, integration within the national emergency framework, and connections with international networks are essential to ensure a timely, effective, appropriate and fully coordinated response.

Blood Collection

There must be a system in place for donors to report postdonation illness or contact with a case that is confirmed postdonation.

Blood and components collected within 14 to 28 days prior to disease onset may be recalled as a precautionary measure. Notification of the clinician may also be considered if the blood or components have been transfused and will potentially provide information about transfusion transmission risk.

The safety of the donation process should be ensured through the use of appropriate protective measures by staff, including hand hygiene and use of masks consistent with national public health guidelines.

Contact

Contact is defined as a person involved in any of the following:

- Providing direct care for COVID -2019 patients, working with health care workers infected with novel coronavirus, visiting patients or staying in the same close environment of a COVID-2019 patient.
- Working together in close proximity or sharing the same classroom environment with a COVID-2019 patient.
- Traveling together with a COVID-2019 patient in any kind of conveyance.
- Living in the same household as a COVID-2019 patient within a 14-day period after the onset of symptoms in the case under consideration.

Clinical Use and Haemovigilance

The clinical need for blood and components must be continually assessed as the scenario changes.

During the initial phase, demand for blood components may either not change appreciably, or may start to decrease as health authorities activate emergency plans and prioritise resources.

Blood services should manage their blood stocks carefully at this time in anticipation of future uncertainty in collection activities.

A haemovigilance system should be in place to capture and analyse any possible cases of transmission through transfusion. With the limited information currently available, documentation and haemovigilance are invaluable in helping to understand the risk from blood and components and the overall effectiveness of the measures taken by the Blood Service.

Useful reference - https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public; AATM Recommendations to prevent COVID-19 infection through the blood supply {Glob J Transfus Med 2020; 5 (1)}

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