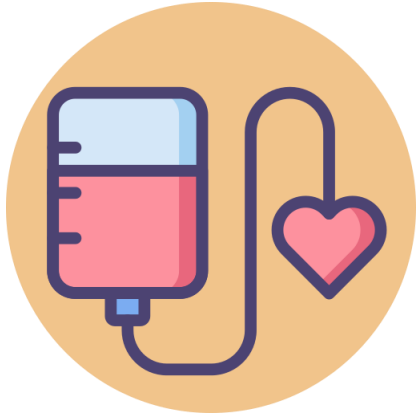
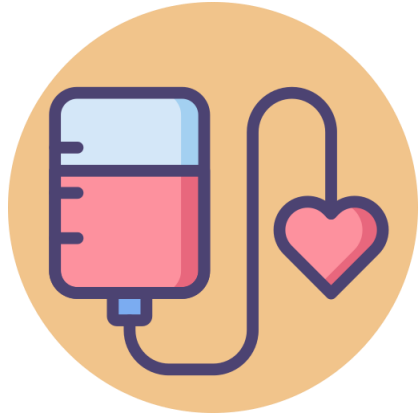

Infection Prevention and Control in Mobile Blood Donation Activities during COVID-19 pandemic

Dr. Braylien Siy
DOH-HFDB



Safe blood is an essential life-saving resource

Needed for wide range of health conditions



Safe blood is an essential life-saving resource

Needed for wide range of health conditions

Challenge: maintain sufficiently stable and safe blood supply

Blood Safety: A Key Priority Area for Patient Safety

- **Administrative Order 2020-0007:** *National Policy on Patient Safety in Health Facilities*
- Strategies:
 - Implement guidelines on safe blood and blood products
 - Establish 100% blood collection from regular voluntary, non-remunerated blood donors from low-risk population
 - Create policy for post-transfusion incident management

Challenges during COVID-19 pandemic

- Relies solely on donation from healthy donors in the community
- Demand remains high
- Lockdowns and “Stay at home” interrupt the supply
- Reduced public activities
- “Will I get COVID-19 at a blood center”?



Mobile Blood Donation Activities

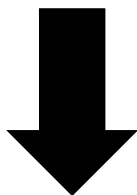
- Essential activity to maintain adequate supply of safe blood
- Serves better as donors need to travel less
- **PRIORITY!** Is protecting the health and safety of donors, patients, and staff



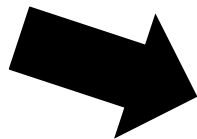
SAFETY FIRST!



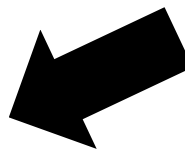
Safe Donors



Safe Staff



**Clean environment
and equipment**



Safe Blood



Employ Strategies to Mitigate Risks

1. Potential risk of transmission through the transfusion of blood and blood components
2. Staff and donor exposure to COVID-19 virus
3. Impact of reduced availability of blood donors
4. Managing demand for blood and blood products
5. Ensure uninterrupted supplies of critical material and equipment
6. Communication to stakeholders
7. Collection of convalescent plasma

Safe Blood

- Theoretical risk of transmission

Safe Blood

- Theoretical risk of transmission

PRE-donation

- Education, screening
- Travel history, contact history, signs and symptoms

POST-donation

- Reminder for symptom reporting within 28 days of donation

Pathogen Reduction

- With published evidence but requires significant logistical and financial investment¹

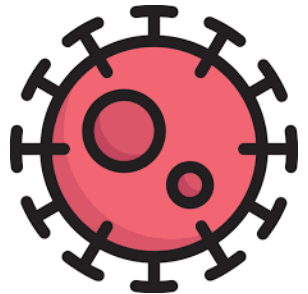
¹Keil, S. D. et al. Inactivation of severe acute respiratory syndrome coronavirus 2 in plasma and platelet products using a riboflavin and ultraviolet light-based photochemical treatment. *Vox Sang*, doi:10.1111/vox.12937 (2020).

Ensuring Safe Staff and Donor

- Respiratory route for COVID-19
- Transmission is possible from asymptomatic, pre-symptomatic, and with mild symptoms
- Infection Prevention and Control Measures for protection

Infection Prevention and Control Principles

- Scientific approach + practical solution
- Prevent harm to patients and health workers
- Public health measures and hazard prevention in the workplace

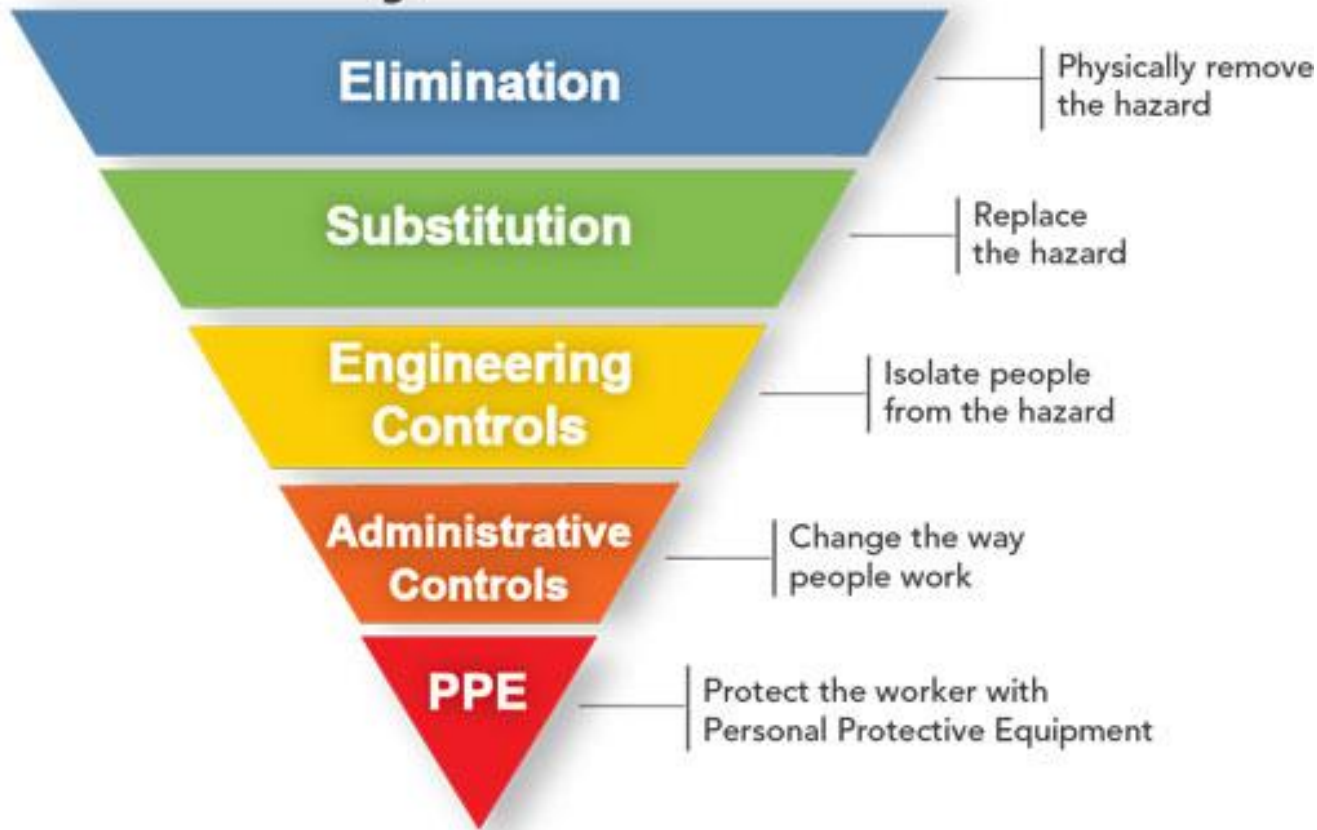


Hierarchy of Controls

Most effective



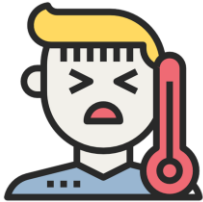
Least effective



Safe Donor

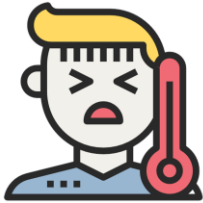
- Only eligible and healthy individuals are allowed to donate
- Extensive donor screening strategies
 - Donor History Questionnaire + COVID-19 screening
- **Department Memorandum 2020-0124: *Interim Guidelines on Ensuring Blood Safety and Adequacy for COVID-19 response***
 - Deferral criteria
 - Referral procedures
 - Blood collection protocol

Safe Donor



**Screening of Signs and
Symptoms**

Safe Donor

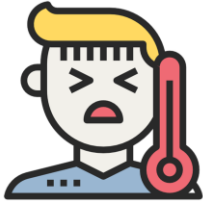


**Screening of Signs and
Symptoms**



Hand Hygiene

Safe Donor



Screening of Signs and Symptoms

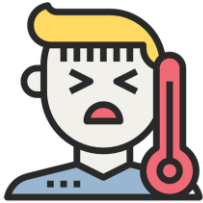


Hand Hygiene



Face mask

Safe Donor



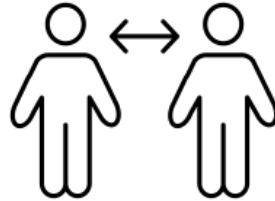
Screening of Signs and Symptoms



Hand Hygiene

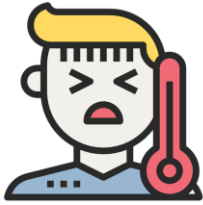


Face mask



Physical distancing

Safe Donor



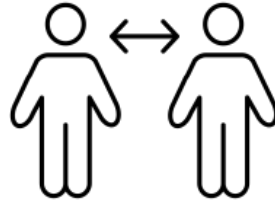
Screening of Signs and Symptoms



Hand Hygiene



Face mask



Physical distancing



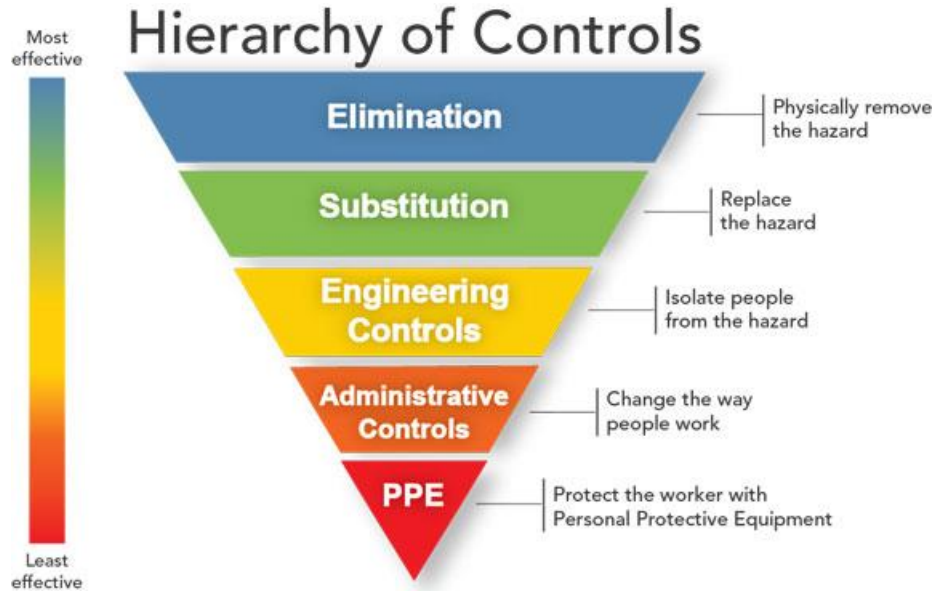
Education

Safe and Healthy Staff

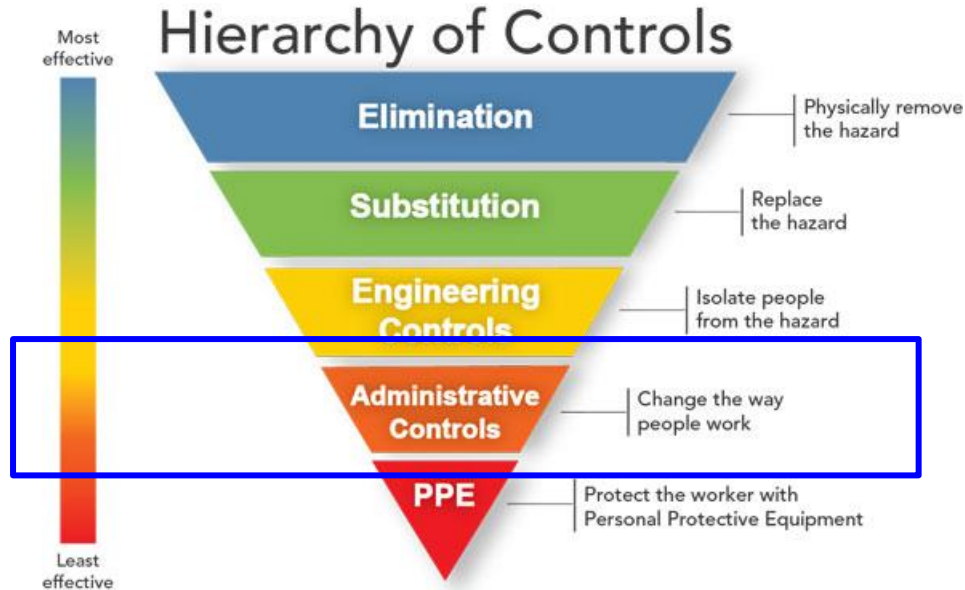
- Routine IPC measures- same as donor practices
- Healthcare worker risk assessment
- Frequent handwashing
- Wear appropriate Personal Protective Equipment
 - Face mask at all times
 - Gloves for venepuncture
- Temperature and symptom check before and after duty



Administrative Controls



Administrative Controls



- Change the way people work to mitigate risk of infection
- Institutionalize strategies to enhance compliance

Administrative Controls

- ✓ Setting policies and guidelines on blood donation activity
 - No companion allowed
 - Deferral and referral guidelines
 - Triage and mandatory temperature and symptoms check
 - Establish and communicate workflow



Administrative Controls



- ✓ Setting policies and guidelines on blood donation activity
 - Limiting number of donor and time of activity
 - Deferral and referral guidelines
 - Triage and mandatory temperature and symptoms check
 - Establish and communicate workflow
- ✓ Education and Orientation of potential donors and staff on symptoms

Administrative Controls



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- ✓ Protocols on monitoring and reporting of symptoms, following-up of donors

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- ✓ Employ standard staff health assessment prior to all blood drives

Administrative Controls



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- ✓ Education and Orientation of potential donors and staff on symptoms
- ✓ Protocols on monitoring and reporting of symptoms, following-up of donors
- ✓ Employ standard staff health assessment prior to all blood drives
- ✓ **IPC person-in-charge identified**

Engineering Controls



Department Memorandum 2020-0208: *Interim Guidelines on Enhancing the Infection Prevention and Control Measures through Engineering and Environmental Controls in all Health Facilities during the COVID-19 pandemic*

Engineering Controls



- **Triage area**
 - Assessment area that is separate from donation area
 - Fill health declaration forms and defer at risk/ symptomatic donors
 - Health education for donors



Engineering Controls



- **Ensure clean environment**
 - Appropriate disinfection of high touch surfaces and equipment
 - 70% ethyl alcohol to disinfect small surface areas and equipment between uses, such as reusable dedicated equipment
 - Sodium hypochlorite at 0.1% (1000 ppm) for disinfecting surfaces and 0.5% (5000 ppm) for disinfection of blood or bodily fluids spills

Engineering Controls



- **Ensure clean environment**
 - Disinfection of donation chair every after donation
 - Change of linen and bed sheet every after donation
 - Foot-operated trash bins are provided
 - Hand washing facilities are present at strategic locations

Engineering Controls



- **Other Physical Measures**
 - Well ventilated area
 - Maintaining physical distancing practices
 - donor beds- 2 meters/ 6 feet
 - waiting and refreshment areas

Engineering Controls



- **Other Physical Measures**

- Place markings
- Separate restrooms for staff and donors
- Additional barrier using clear, non-porous material



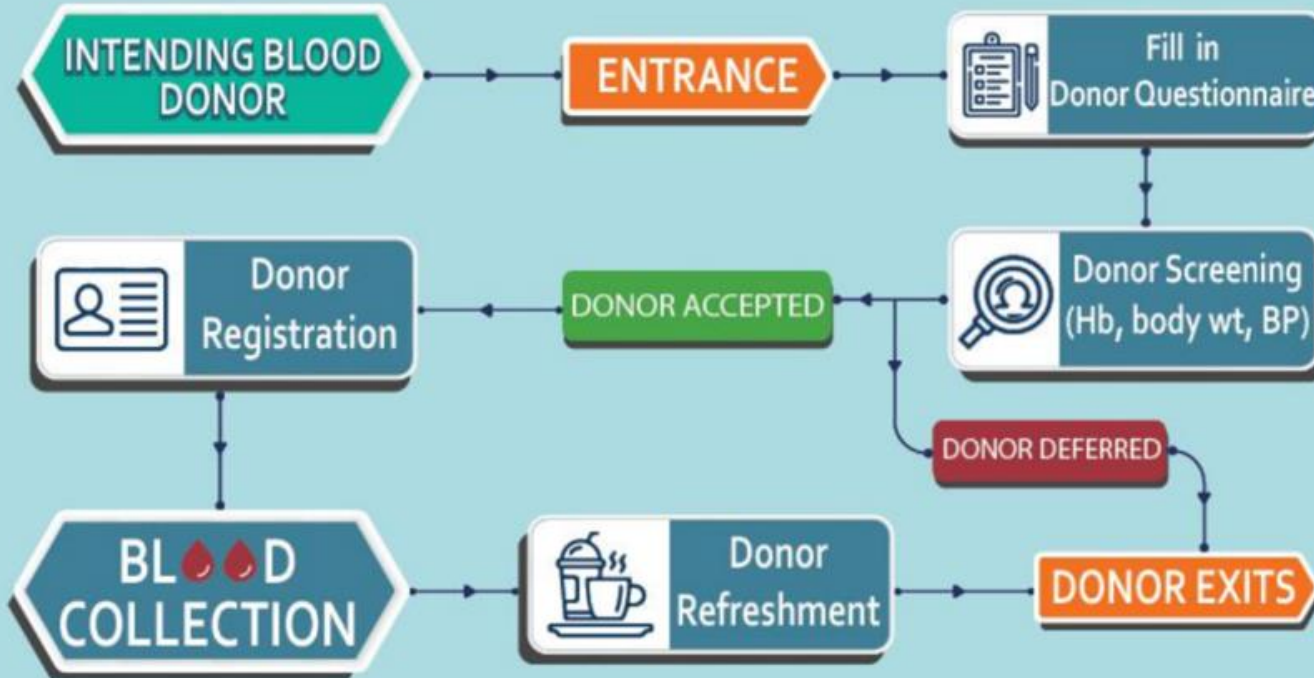
Engineering Controls



- **Ensure clear foot traffic**
 - Separate entrances for staff and donors
 - Establish clear workflow and donor movement in the donation center (unidirectional)



A FLOOR PLAN FOR BLOOD DONATION CAMPAIGN



ADDITIONAL DONOR QUESTIONS AS PER COVID-19



Have you travelled to COVID-19 affected countries or areas during 14 days ?



Do you have cough ?



Do you have fever ?



Are you having difficulty in breathing ?



Do you have sore throat ?



Do you have a cold/flu with body ache or myalgia ?



Do you have diarrhea ?



Do you have a direct contact or are you taking care of any COVID-19 patient ?

Steps You Can Take

- Wash hands frequently with soap and water or an alcohol-based hand sanitizer, and avoid hand to face contact
- Avoid close contact (within about 6 feet) with those who are ill;
- Self-quarantine after caring for someone who is sick;
- Stay home when experiencing symptoms of illness; and
- Use good cough etiquette; cover mouth and nose when coughing or sneezing and avoid touching eyes, nose, or mouth.
- There is no known risk to the safety of the nation's blood supply and there are no reports of spread of this or any respiratory virus, by blood donation
- Giving blood is not a risk for donors to contract COVID-19.
- Misinformation will negatively impact the blood supply. (For example, if donors refrain from blood donation over fear of contracting the virus.)
- Prior to entering the blood collection area, we ask a series of questions designed to ensure a donor is not at higher risk for a COVID-19 infection.
- After the questions but before you enter the facility, we take the donor's temperature.
- In our pre-donation questionnaire, we again ask "Are you feeling healthy and well today?"
- Donors who are not feeling well or exhibit symptoms of illness are deferred from donation.



For more information : dial hotline No.2121. www.health.gov.bt

www.facebook.com/MoHButan/ [@MoHButan](https://twitter.com/MoHButan) [ministryofhealthbhutan_](https://www.instagram.com/ministryofhealthbhutan_)



Other Safety Measures:

- **Post-donation reminder!**
 - Checklist
 - Contact numbers
- Pro-active cross checking of confirmed cases/
symptom development



Is Mobile Blood Drive possible during COVID-19 pandemic?



Is Mobile Blood Drive possible during COVID-19 pandemic?



Require bigger site with less donation

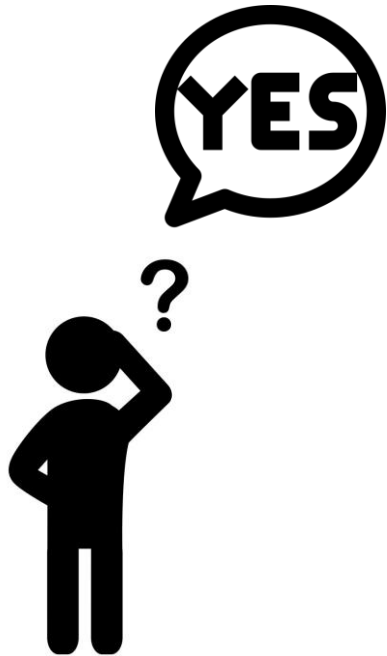
Is Mobile Blood Drive possible during COVID-19 pandemic?



Require bigger site with less donation

Serves the donor better

Is Mobile Blood Drive possible during COVID-19 pandemic?



Require bigger site with less donation

Serves the donor better

More logistical needs to ensure adequate protection

Is Mobile Blood Drive possible during COVID-19 pandemic?



Require bigger site with less donation

Serves the donor better

More logistical needs to ensure adequate

**protection
Balance demand and supply**

Link to DOH Guidelines and Policies

DM No. 2020-0124 https://bit.ly/DM0124	Interim Guidelines on Ensuring Blood Safety and Adequacy for COVID-19 Response
DC No. 2020-0181 (https://bit.ly/DM0181)	Reiteration of Functions of the Infection Control Committee (ICC) and Infection Control Team (ICT) in Healthcare Facilities
DM No.2020-0056 (https://bit.ly/DM0056)	Interim Guidelines for 2019 Novel Coronavirus Acute Respiratory Disease (2019-nCoV ARD) Response in the Workplace
DM No. 2020-0249 (https://bit.ly/DM0249)	Use of IPC Checklist for Healthcare Workers Readiness
DM No. 2020-0208 (https://bit.ly/DM0208)	Interim Guidelines on Enhancing the Infection Prevention and Control Measures through Engineering and Environmental Controls in All Health Facilities and Temporary Treatment and Monitoring Facilities during The COVID-19 Pandemic
DM No. 2020-0157 (https://bit.ly/DM0157)	Guidelines on Cleaning and Disinfection in Various Settings as an Infection Prevention and Control Measures Against COVID-19
DM No. 2020-0167 (https://bit.ly/DM0167)	Interim Guidelines on the Proper Handling and Disinfection of Non-critical Items Used in the Management of COVID-19 Patients in All Health Facilities and Temporary Treatment and Monitoring Facilities
DC No. 2020-0191 (https://bit.ly/DC0191)	Circulation of the Health Care Waste Management Manual 4th Edition
DC No. 2020-0106 https://bit.ly/DC0106	Use of WHO Interim Guidelines for Health Workers Exposure Risk Assessment and Management in the Context of COVID-19

Thank you for listening!

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