



Each blood donation saves 3 lives.

Can we secure our blood supply in COVID-19? Hong Kong Experience

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Each blood donation saves 3 lives.

Issues and Problems

- Blood is an essential medicine and it relies on donation from healthy donors in the community.
- Common myth – “Will I get infection during blood donation?”
- Despite COVID-19, blood is still needed for different groups of patients. From short lived platelet to red cells and plasma, continuous and non interrupted supply is crucial.
- Scheduled appointments and scheduled blood drives are mostly cancelled. It results in significant pressures on the blood services to supply blood products to hospitals.
- A new question is **“Will I get COVID-19 at blood center as we are advised to stay home as far as possible?”**



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Safety first



Background

- The BTS has started to use alcohol hand rub since 2002.
- Hong Kong has gone through period of SARS (2003), Avian Flu and Swine Flu H1N1 (2009).
- Staff and donors are used to wear mask during the period of SARS upon advice by government and health authority to tighten infectious control measures.
- The BTS routinely checks donor body temperature since SARS.



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Not only local citizens, but also domestic helpers and non Chinese are used to put on mask while on the street.



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Existing Practices In place

- Per GMP requirement, environment should be clean with established infection control measures in place.
- Prospective donors must undergo eligibility screening (including certain travel history deferral policy e.g. Malaria and West Niles virus) before accepting for blood donation.
- Prospective donors are expected to have no symptoms and fever before giving blood.
- Standard precaution in venepuncture and blood donation.
- Post donation reminder to report any symptoms after donation.
- All blood screened for mandatory infectious diseases (HIV, HBV, HCV, Syphilis, HTLV) before issue to hospitals.



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Threat of SARS-CoV-2 to blood service

- Highly infectious
- Uncertain risk to blood safety; but
 - No report of transfusion transmission from previous experience in SARS and MERS;
 - Not known to have significant viraemia in asymptomatic person.
- However, better to do additional precautions measures to
 - Minimize the risk of transmission (human to human *; blood borne if unfortunately happened)
 - Gain public confidence to continue blood donation to support the patients in need of blood transfusion

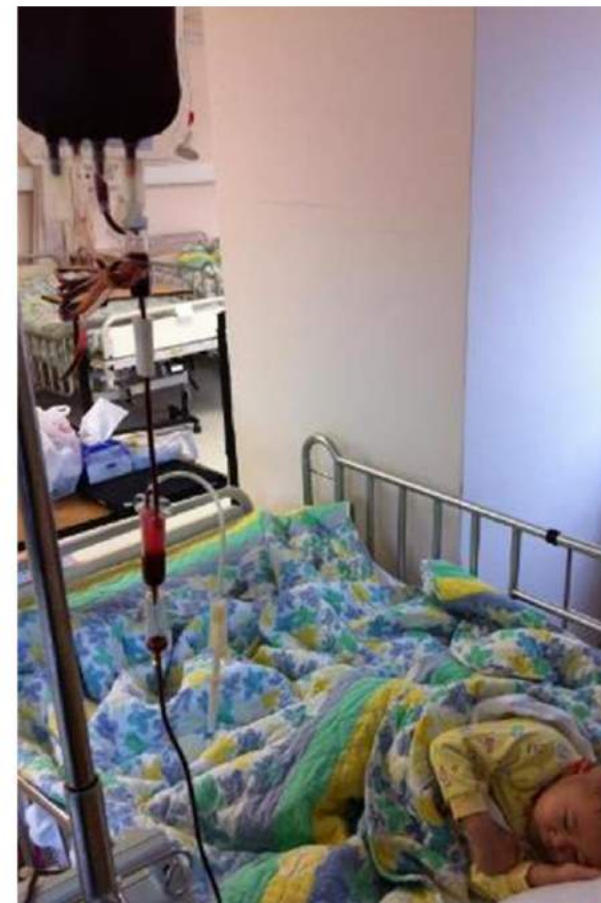
Human to human means: staff to donor; donor to donor; donor to staff
(staff also include out source one. Donor may have accompanied persons)



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Mission

- To secure a sustainable and safe blood supply including short lived components to meet the transfusion demand of certain groups of patients with
 - blood diseases;
 - cancers undergoing treatment;
 - organ and HSC transplantation;
 - emergency and trauma





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Objectives

- To restore/ gain public confidence that blood donation is safe and crucial for the healthcare system at any time
- To minimize the risk of COVID-19 in blood donation and transfusion settings (from donor and staff who can be asymptomatic)





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What additional measures have been taken in COVID-19

1. Blood Safety
2. Infection Control Measures for
 - Staff (including outsource one)
 - Donors (including accompanied persons)
 - Environment plus equipment
3. Communication to staff, donors and public



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Blood Safety (1)

1. As no blood donation screening test for SARS-CoV-2 is available, BTS has to rely on the donor deferral policy to minimize the risk of potential infected donors from entering into the blood supply chain.
 2. Donor deferral policy has been revised and updated for many times since 7 January from
 - 14 days travel history 1) to Wuhan, 2) to Hubei Province and hospital in Mainland; contact history of confirmed case;
 - 28 days travel history 3) to Mainland; 4) extended to Korea and 5) to further extended to Iran and 3 regions in Italy;
 - 6) to follow CHP list of places with active community transmission on 1 March; 7) expanded list on 11 March and 14 March; 8) on 16 March, deferral any travel history within the last 28 days.
- In short, contact history with confirmed cases and/or travel history → deferral. Those with contact history with suspected cases should also not come for donation until clearance.**



Blood Safety (2)



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3. As a standard practice, remind donors to report any symptoms within 4 weeks after donation.
- Pathogen reduction technology may be considered in enhancing the blood products safety (as it has been shown to be efficacious to SARS and MERS coronavirus)
 - (BTS has been in close communication with blood service worldwide for sharing of latest update and information.)



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Management of Donors (1)

1. All prospective donors who are febrile and have respiratory tract symptoms are advised to not to enter blood collection venues and seek medical consultation immediately.
2. Before entering blood collection venues, all prospective donors are required to wear surgical mask, have their temperature check and use alcohol hand rub.
3. Surgical mask should be worn all the time at blood collection venues.





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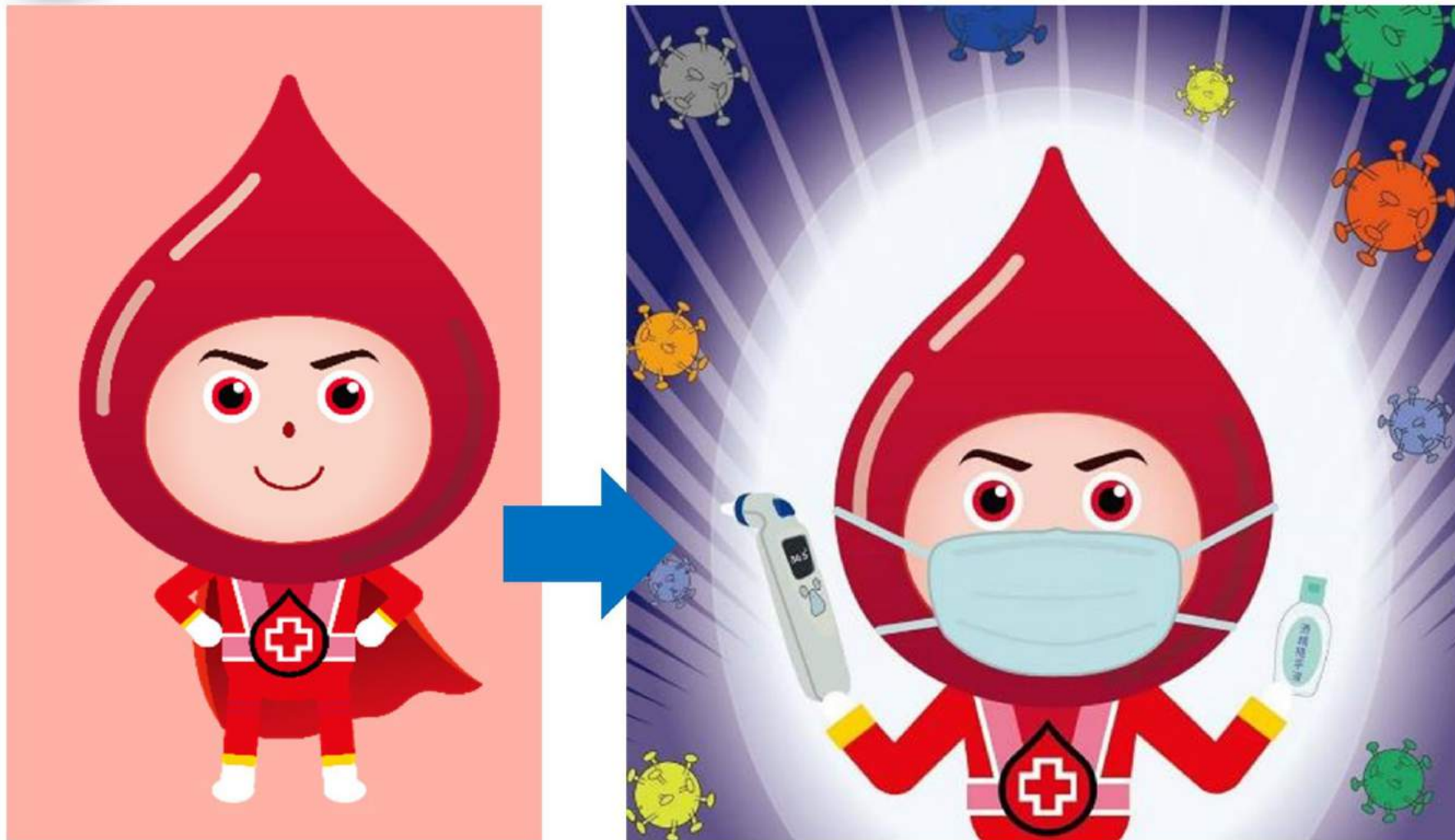
Management of Donors (2)

4. Alcohol based hand rubs is provided at convenient area such as reception and resting area to facilitate donors for enhancing hand hygiene.
5. All prospective donors are advised to arrange advance booking via Apps or phone booking as far as possible **to avoid waiting time and to have a short stay for donation**
6. Remind public donors not come in big groups and not gather.
7. Avoid to bring in accompanied persons.



Each blood donation saves 3 lives.

Donors transforms into a safe “Super Hero”!





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Donors

1. advised to book appointment;
2. not come in big group;
3. need to wear masks all the time;
4. take temperature before entering;
5. frequent use of alcohol hand rub.





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Environment

- Social distancing as far as possible (donor chair to space out)
- Frequency of environment cleaning is increased through outsourced staff.
- High touch area is also frequently disinfected.
- Ventilation is maintained at high speed at all time to increase air change.
- Lidded rubbish bins are provided for disposal of surgical masks.
- Alcohol hand rub is available in the venue for disinfection.





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Disinfection of Environment and equipment

- Per GMP requirement, cleanliness is essential.
- Selecting an appropriate disinfectant that is suitable to use
- e.g. for environment:
 - 1:99 diluted household bleach (mixing 10ml of bleach with 1 litre of water) can be used for general household cleaning.
 - 1:49 diluted household bleach (mixing 10ml of bleach with 0.5litre of water) is used to disinfect surfaces or articles contaminated with vomitus, excreta, secretions or blood.
 - Or use Neutral Disinfectant Cleaner (Ecolab Inc, Minnesota US)
- Frequency: before start of blood drive, as frequent as possible e.g. once after every donation



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Donation process

- Staff
 - To wear gloves for venepuncture
 - To use alcohol hand rub before each procedure
- Donor and staff to wear face mask all the time
- Change of bed sheet and disinfection of donor chair after every donation
- Standard blood precaution procedure for packaging





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Communication with Public and Donors

- In addition to poster/ easy roller banner of latest infection control measures, the message on
 - blood demand, appointment booking, shortening of the stay and avoidance of gathering at blood collection venue
 - as handy tips are repeatedly emphasized in different platforms (in particular Social Media).
- A supplementary poster is posted up to remind publics who have returned from the countries that need quarantine or are under medical surveillance, not to enter blood collection venues.
- Mass media could help to reinforce the above messages.



Other safety measures

- Post donation reminder
- Cross checking of confirmed cases if blood donation has been made at asymptomatic stage

DIN

AFTER BLOOD DONATION

- Develop signs or symptoms of an infection within 4 weeks (e.g. common cold, fever, etc.), or develop hepatitis, tuberculosis or malaria within 6 months.
- Decide your blood should not be used.
- Revise the information you provided in the Blood Donation Registration Form.

Please contact us at:
2710 1333 / 2710 1210
 (Office hours) (Outside office hours)

九龍區 KOWLOON	香港區 HONG KONG	新界區 NEW TERRITORIES
輸血服務中心總匯 Headquarters Donor Centre ☎ 2710 1202/1333 旺角捐血站 Mongkok Donor Centre ☎ 2770 5930 觀塘捐血站 Kwun Tong Donor Centre ☎ 3148 1375 西貢捐血站 West New Territories Donor Centre ☎ 2507 7733	網羅灣捐血站 Causeway Bay Donor Centre ☎ 2834 2084 中區捐血站 Central District Donor Centre ☎ 2526 1420 	沙田捐血站 Shatin Donor Centre ☎ 2603 0100 屯門捐血站 Tuen Mun Donor Centre ☎ 2414 2378 元朗捐血站 Yuen Long Donor Centre ☎ 2478 6000

POST DONATION ADVICE

Over the next 12 hours

- ✓ Drink plenty of fluid to replenish volume loss.
- ✓ The plaster can be removed after few hours.
- ✓ Avoid heavy lifting to prevent bruising of venipuncture site.
- ✓ Avoid strenuous exercise.

Iron Absorption Tips

- Increase intake of iron-rich food.
- Vitamin C-rich food enhances iron absorption.
- Avoid coffee or tea during meals.
- Complete the whole course of oral iron supplement to replenish the iron store.

HANDLING OF ADVERSE REACTION

Inting

lie a seat or lie down immediately
d raise your legs to increase blood
y to the brain.
en tight clothing and belts.
alm, take slow and long deep
t.
istance from passers-by.

y occur following blood
ere is bleeding underneath
gradually subside and
3 weeks.
the bruise within
1 donation;
sed for pain

in / Numbness

hiness, redness, swelling,
nypuncture site, please
vice or consult your






鐵入食單
IRON Food



口服鐵質
補充劑



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App Store



GET IT ON
Google Play



Download NOW 3
HK Blood APP



Facebook



eDonor



Donation due
date calculator

Enquiry Hotline : 2710 1234
 Website : www.ha.org.hk/rcbts
 Email : rcbts@ha.org.hk

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Mobile blood drive through supportive sponsor



"we fully prepared and demonstrated to our staff that they are safe to donate blood!"



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Impact of COVID-19 on Blood Service



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Imminent Problems encountered

1. “Lock down”,
2. Significant reduced public activities
 - Reluctant to offer venues for mobile blood drives and
 - not willing to go out
3. Home office work – cancellation of scheduled mobile blood drives
4. Suspension of school and universities
5. Lack of confidence and fear of acquiring infection during blood donation (from venepuncture, environment, staff, during travel to/ from donation venues)



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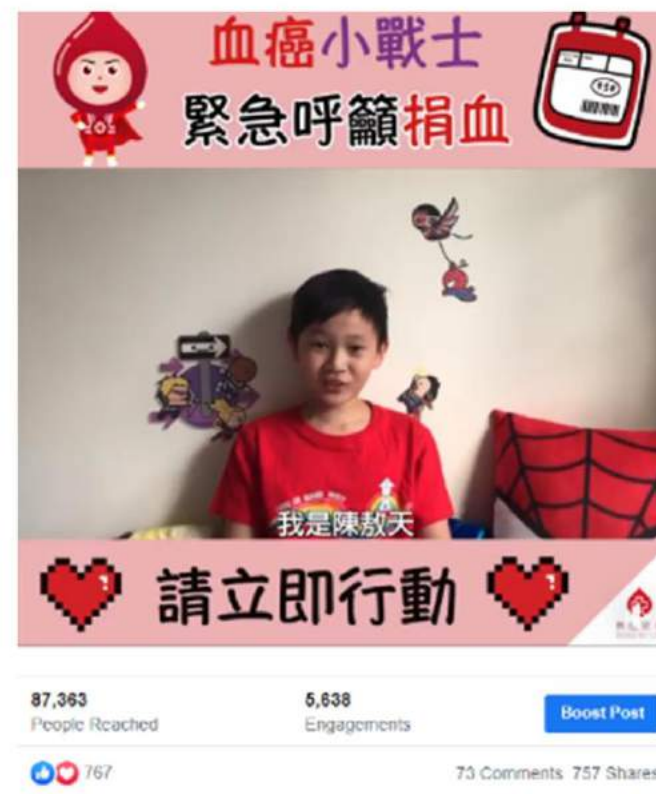
Stock never last long. Sadly, it happened!

血庫存量極低
Alarming Blood inventories





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“What if there is no blood product...”



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請即捐血
BOOK A DONATION NOW

血庫告急

Emergency Appeal for Blood Donations

Emergency Appeal
via Facebook-
reaching 400k+
users with ~3k
shares

428,278

People Reached

32,064

Engagements

Boost Post



951

505 Comments 2.9K Shares



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Strategies

- Maintain operation in the safest ways in accordance with the latest infection control measures and organization policy
- Mobilize public, in particular regular donors to give blood
- Works with sponsors in mobilizing their staff (home office) to donate

Restore or Gain public confidence – blood donation is safe; no risk of infection would be acquired through donation, venue, staff and even travel to/from



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Handy tips

- Addresses, phone numbers and opening hours of donor centres
- Deferral policy concerning travel history
- Precautionary measures already taken
- Blood is always needed!



58,280
People Reached

10,751
Engagements

Book

783

134 Comments 33



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Outcome

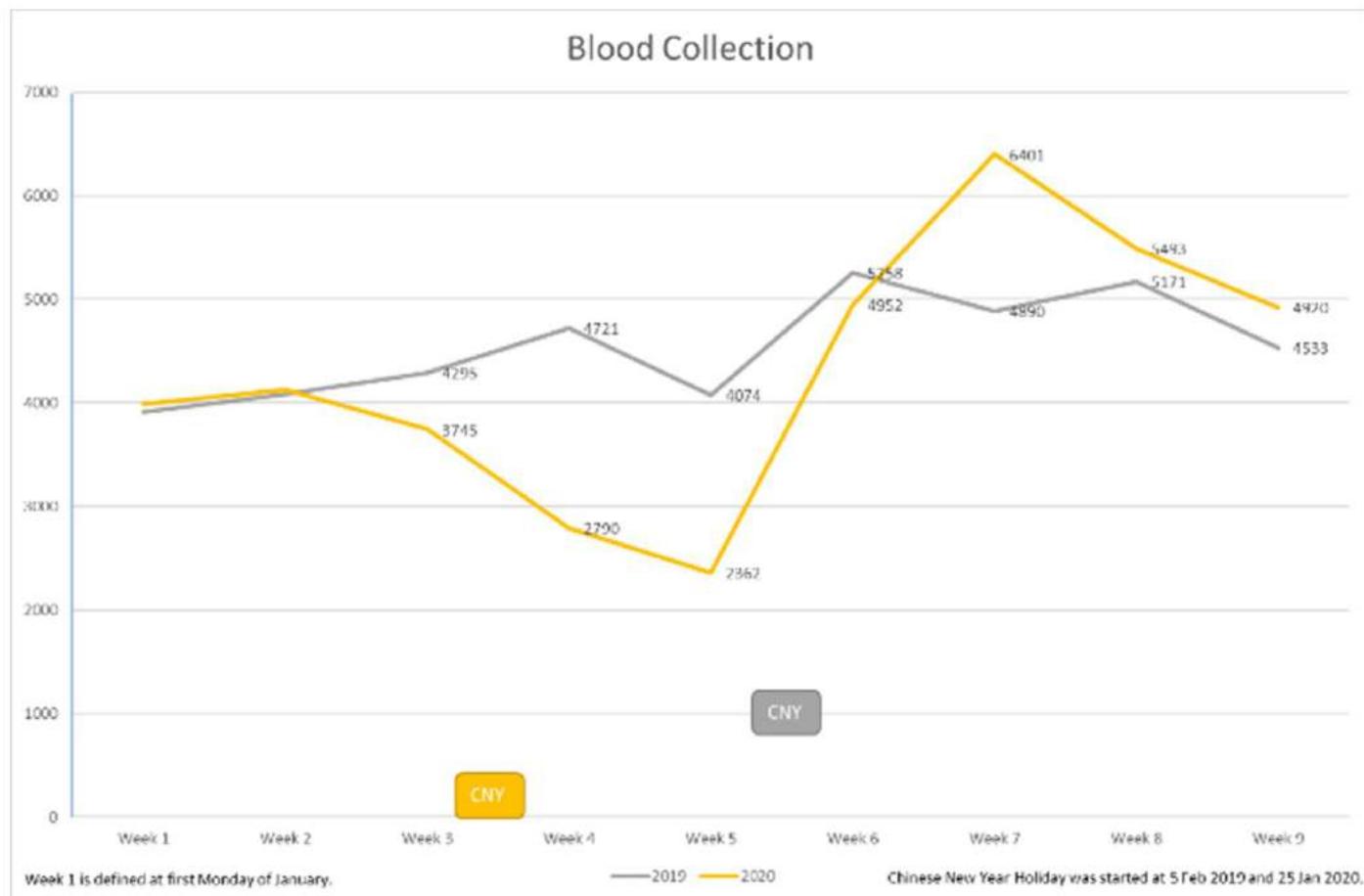
(additional points to note)

- Beginning of the year is usually at the time of winter surge when seasonal influenza is prevalent. It affects both demand (↑) and collection (↓).
- Blood demand in Public Hospitals accounted for about 92% of the territory.
- Territory wide inventory = BTS + all Public Hospitals.
- Chinese New Year is a major holiday. It can be somewhere between late January to mid February. Non - emergency service is usually scaled down at the same time during Chinese New Year. On first day of Chinese New Year, it is usually no blood collection activities. \
- In response to COVID-19, Hong Kong announced “Serious” Response Level on 4 January and escalated to “Emergency” on 25 January (first day of Chinese New Year). Non-emergency service was further scaled down since then.
- All mobile blood drives were cancelled since 5 February 2020 due to suspension of school, switching to home office work and advised suspension of public activities,
- A blood appeal was made on 11 February 2020



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Supply (blood collection)

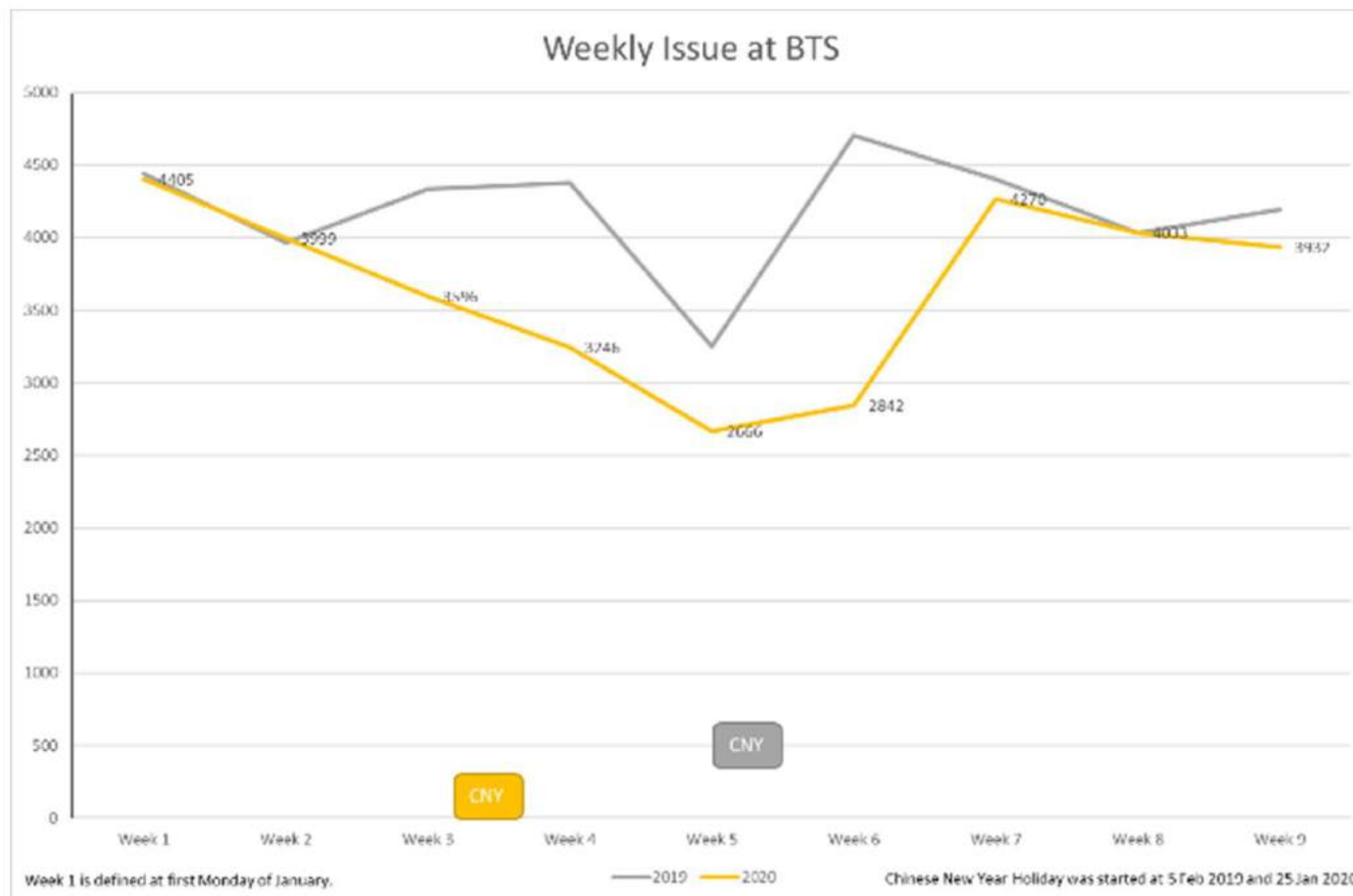




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Demand from hospitals

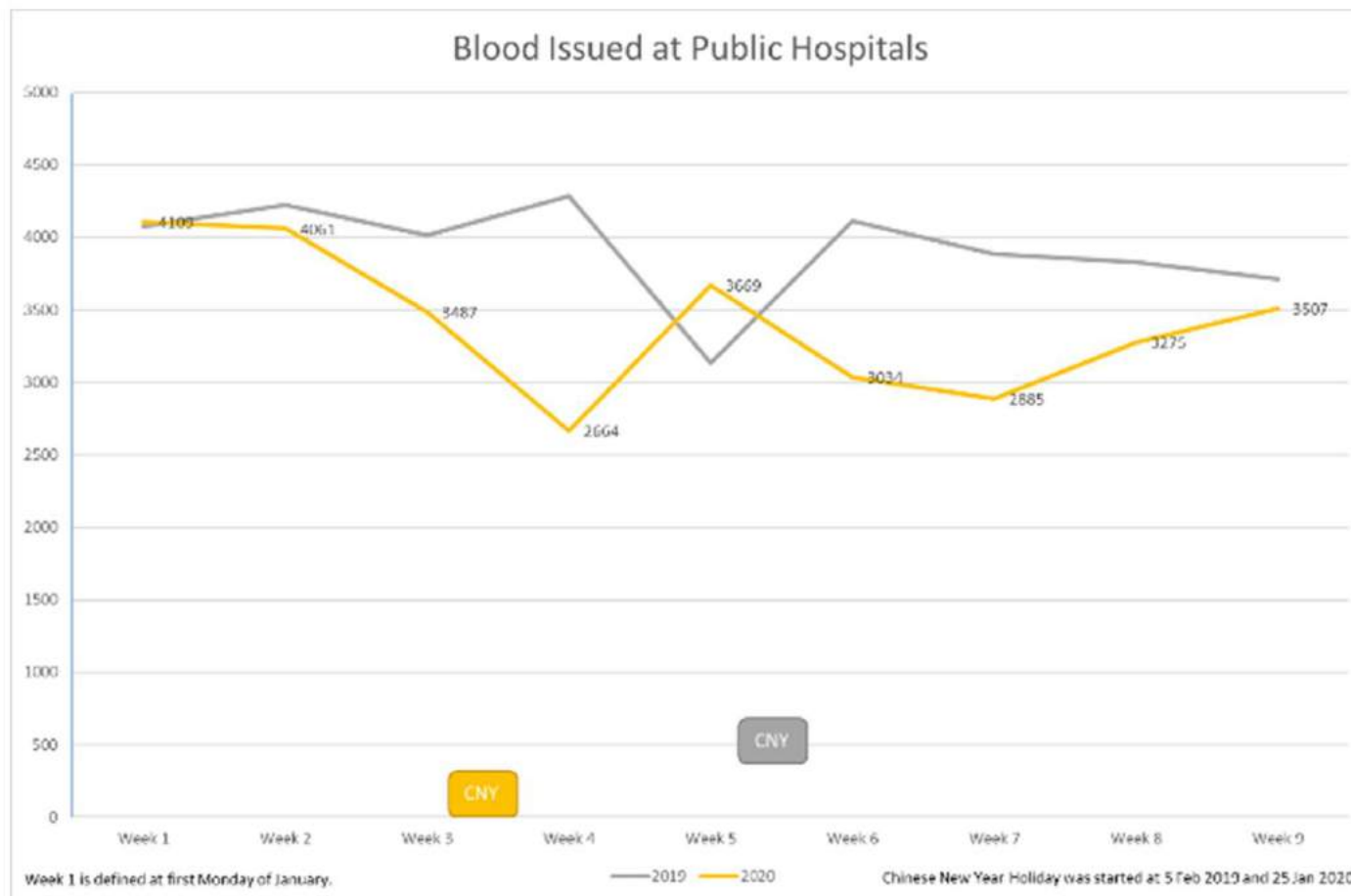
(it comprises two elements – clinical use and replenishment of inventory to a “comfortable” level)





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Clinical Demand (i.e. actual transfusion need)





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Inventory of BTS and all Public Hospitals





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Other measures to meet transfusion demand

1. Advocate the use of alternative measures instead of blood transfusion
2. Adhere strictly to transfusion guideline
3. Reduction of non-emergency services
4. (Ongoing communication with clinicians on the latest blood supply and demand situation)



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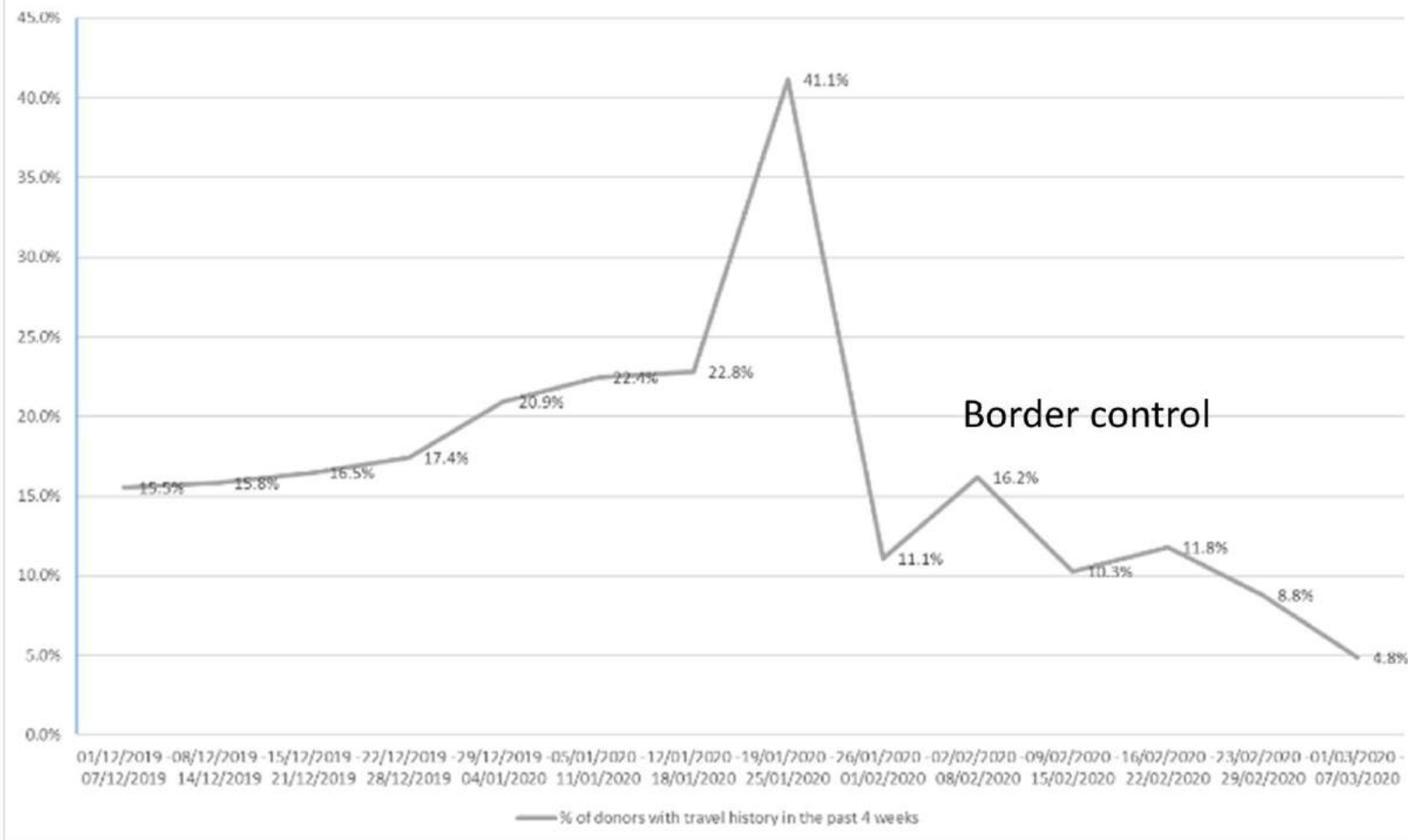
Other important points worth considering

- Actively monitor travel history pattern among the blood donors to determine the (potential) impact from increasingly stringent travel restriction on the upcoming blood donation



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What would be the impact of COVID-19 related travel restrictions on blood supply?
A retrospective analysis of donors having travel history within the last 4 weeks





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Conclusion

- Previous experience and early implementation of measures enable us to secure blood safety and supply during this difficult and unpredictable period
- Measures to restore and gain public and donor confidence in blood donation are extremely important but may not be easy to achieve
- Support from staff and many other including donors and sponsors are indispensable to secure the blood supply
- We are still working on strategies against the ongoing difficulties and uncertainties.



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Acknowledgement

Our Applause to

- All selfless healthcare workers and people who work hard day and night to combat COVID-19 and keep us safe
- All our generous donors and sponsors who help to secure local blood supply in meeting patients' transfusion need during this difficult time
- All my staff who spare no effort to maintain the blood collection service