Policy Document

Blood Donation (2024)

Executive Summary

The Australian Medical Student Association acknowledges the importance of blood donation as a vital part in many life saving medical treatments. In Australia, there is presently a mismatch in the demand for blood products and the rates of donation with a need to find new and innovative ways to increase blood donation whilst ensuring ongoing safety and quality. Lifeblood Australia and the Therapeutic Goods Administration are responsible for the regulation of blood product collection and decide upon deferral periods for prospective donors. Deferral periods are population based restrictions on donations which aim to minimise the risk of Transfusion Transmissible Infection (TTI). Constant modifications of guidelines are required to ensure that restrictions are based on the most up to date evidence, and limit discrimination against groups that are affected by the deferral periods.

In light of new changes to deferral periods, AMSA calls upon the Therapeutic Goods Administration to critically evaluate all submissions from Australian Red Cross Lifeblood concerning amendments to deferral periods and acknowledge that population-level deferral periods have historically disproportionately affected certain groups within society and consider these effects when making future decisions about deferral periods and alternative pathways for donation.

As a way of increasing the potential number of potential donors and ensuring that high-risk groups for TTIs are not unnecessarily discriminated against, new pathways for donation including the Plasma Pathway have been proposed. This proposal will allow many groups currently unable to donate blood to donate plasma due to the filtration process significantly reducing the risk of TTIs in plasma.

Another potential method for screening for TTI risk is an Individual Risk Assessment model, which is a questionnaire for potential donors to determine suitability as an alternative to the current population based deferral periods. In the setting of new proposed measures to continue

Head Office
A Level 1,
39 Brisbane Avenue,
Barton, ACT 2600

Postal Address
PO Box 6099,
Kingston, ACT 2604

ABN:
67079 544 513

Email:
info@amsa.org.au

Website:
www.amsa.org.au

changes in regulation, AMSA calls upon Red Cross Lifeblood to continue in its adoption of the plasma pathway as a safe way for people from deferral groups to contribute to the blood supply without risk of transmitting TTIs; and continue the evaluation of an Individual Risk Assessment based model for blood donation selection.

Policy Points

AMSA calls upon:

1. The Therapeutic Goods Administration (TGA) to:
    a. Critically evaluate all submissions from Australian Red Cross Lifeblood concerning amendments to deferral periods;
    b. Ensure decisions and restrictions regarding blood donation are based solely on the most up-to-date and peer-reviewed evidence;
    c. Impose restrictions on prospective donors only to the extent that best available evidence suggests is necessary to protect the safety of the blood supply; and
    d. Acknowledge that population-level deferral periods have historically disproportionately affected certain groups within society and consider these effects when making future decisions about deferral periods and alternative pathways for donation;
2. Australian Red Cross Lifeblood to:
    a. Continually review deferral periods to ensure they are based on current evidence-based research, including but not limited to:
        i. Sexual Activity (men who have sex with men (MSM), people on Pre-Exposure Prophylaxis (PrEP), people who have sex with sex workers and sex workers and people who have sex with people who come from high-risk areas); and
        ii. TTI risk from tattoos, ear piercings and body piercings done in Australian licensed tattoo premises.
    b. Advocate for more evidence-based research on deferral periods including but not limited to:
        i. MSM, people on PrEP, people who have sex with sex workers and sex workers and people who have sex with people who come from high-risk areas;
        ii. TTI risk from tattoos done in Australian licensed tattoo premises;
    c. Continue to propose submissions to the TGA which:
        i. Maintain the safety of Australia's blood supply; and
        ii. Align deferral periods and alternative pathways with the most current evidence-based research.

d. Review the screening process for blood donors and consider alternatives to population-level deferral; and
e. Reevaluate all available evidence around TTI risk from tattoos done in Australian licensed tattoo premises. If they deem it appropriate, to submit to the TGA to reduce or remove the 4 month deferral period;
f. Continue in its adoption of the plasma pathway as a safe way for people from deferral groups to contribute to the blood supply without risk of transmitting TTIs;
g. Continue the evaluation of an Individual Risk Assessment based model for blood donation selection;
h. Provide support for communities and individuals affected by deferral periods, such as MSM and sex workers, by:
    i. Implementing follow up and referral for individuals unable to donate due to deferral periods
i. Continue to research how potential donor screening can be made more acceptable to maximise donor comfort and the likelihood of donors returning to donate;

3. The Australian federal and state governments to:
    a. Implement policy based on the acceptance of Lifeblood submissions by the TGA regarding changes to deferral periods;
    b. Support and/or conduct research investigating TTI prevalence and transmission risk among deferral groups; and
    c. Provide support for communities and individuals affected by deferral periods, such as MSM and sex workers, by:
        i. Increasing research into the experiences of individuals experiencing deferral periods and explore what supports are required;
    d. Continue initiatives that improve on the management and use of blood products;
4. The TTI research community to:
    a. Continue conducting and making publicly available evidence-based research on TTIs, specifically focussing on:
        i. Behaviour based screening and exclusion policies as an alternative to population-based exclusions;
        ii. Epidemiology of TTIs; and
        iii. The impact of reduced deferral periods on:
            1. Donation rates; and
            2. Risk of transmission via blood products.
    b. Redress and acknowledge historical practices of exclusion in evidence-based research on TTIs and centre affected communities in future research

5. AMSA National Executive and Projects, such as Vampire Cup and AMSA Queer, to:
    a. Continue to engage and support individuals who can't donate due to deferral periods;
    b. Update the medical student community regarding any changes to deferral periods, donor exclusion criteria and the plasma pathway;
    c. Continue, and increase, formal collaboration with AMSA Queer during AMSA's National Vampire Cup Blood Drive;
    d. Recognise the autonomy of individuals who are affected by deferral periods to make their own choices in regards to engaging with advocacy on the issue; and
    e. Advocate for increased evidence surrounding blood deferral, particularly for MSM and other at risk groups;
6. Medical schools to:
    a. Provide appropriate education of medical students in:
        i. The epidemiology and associated risks of TTIs;
        ii. The need for and importance of evidence-based deferral periods or alternative pathways; and
        iii. The historical and political contexts of current deferral periods.

Background

1.0 Introduction

Blood product (blood, blood components, and/or plasma derivatives) transfusion is a vital part of many lifesaving medical treatments (1). In Australia, over 1.7 million individual donations are needed annually, (2) but in 2023 only 1,633,788 were made (3) and at no point over the past five years has the optimum number of donations required per year been reached (4) (see Appendix 1 for Australia's annual donations and donor numbers). Every year, only 3% of Australians donate blood products (5).

In Australia, the medical profession's ability to administer blood products is reliant on an adequate and safe national supply (6). Supply of blood and blood products falls under the oversight of the National Blood Authority, who manage and coordinate a national scheme on behalf of the State and Federal governments (6) The majority of Australia's blood supply is sourced from voluntary donors within the community and is supplied by the Australian Red Cross Lifeblood (Lifeblood) service (1,6). In addition to this, all of Australia's transfused blood products are regulated by the TGA, under the Therapeutic Goods Act 1989 (Cth) (7). This Act outlines the standards that blood product collection and manufacturing must adhere to, as well as the standards surrounding donor selection and testing, in order to minimise the risk of TTI (7).

One of the most notable changes to eligibility criteria recently occurred in 2022, when regulations around UK donors loosened and the 'mad cow' ban was lifted (8). This saw an influx of new donors, with Lifeblood having predicted an 18,000 person increase but 34,000 stepping up to the challenge, contributing 8% of all blood and plasma donations in the first 12 months (8). New regulation changes are on the horizon, with a plasma pathway and individual risk assessment being announced in a media release this year (See section 3.5 and 5.2) (9).

2.0 Donation procedure and product usage

A summary of the blood donation process can give insight into the procedure itself and the testing, storage and use of blood products afterwards.

2.1 Before the donation:

Firstly, donors can check their eligibility online, find a donor centre and book a donation (10). Donors must bring ID to the centre and ensure that they have sufficiently hydrated and eaten before the donation (11). A reception staff member will greet you upon arrival with a confidential questionnaire, which you can complete

Head Office
A Level 1,
39 Brisbane Avenue,
Barton, ACT 2600

Postal Address
PO Box 6099,
Kingston, ACT 2604

ABN:
67079 544 513

Email:
info@amsa.org.au

Website:
www.amsa.org.au

in a quiet space in the donor centre. You will then proceed to a private interview room to discuss your responses with a trained staff member, who will clarify any questions and ensure you are fine to donate. They will also perform a 'finger prick' test to check donor haemoglobin and take your blood pressure and pulse rate (11).

2.2 During the donation:

Depending on which blood product you are giving, for instance, whole blood, plasma or platelets, the duration and procedure of the donation will differ slightly. However, in all cases, donors sit in a chair, are linked up to the donation machine and are monitored by nursing staff throughout (11).

2.3 After the donation:

Donors are encouraged to rest in the donation chair for 5 minutes after the donation is completed, then are able to sit at the refreshments area for 15-20 minutes and enjoy a drink and snack. It is important to rehydrate afterwards, avoid alcoholic beverages and strenuous activity, eat regular meals and rest. Side effects from donations can occur, such as minor bruising, feeling faint or fainting. If donors feel unwell after the donation it is important to let Lifeblood staff know (11).

2.4 Blood product testing:

Blood is tested to ensure recipients are safe from bloodborne infections, the likelihood of which is less than one in a million owing to rigorous screening and testing (12). Donations are tested for blood type and red cell antibodies to match to recipients, infectious diseases such as HIV, Hepatitis B and C and sometimes Human T-lymphotropic virus, Syphilis and Cytomegalovirus. Despite rigorous testing, even the most sophisticated tests can miss infections, or the infectious are not detectable for a time after the person contracted the infection. To keep blood recipients safe, the eligibility questionnaire and sample testing are used in conjunction (12).

2.5 Blood product usage:

Donations are transported to processing centres where they are manufactured into blood components, such as red cells, platelets and plasma products (13). They are stored within specific requirements to maintain quality and shelf-life, and following processing and testing they are released for distribution to transfusion labs in hospitals and given to patient recipients. (4) Red cell blood products can be used for clinically significant anaemia (13). Fresh frozen plasma can be made into 18

different treatments such as immunoglobulins (to enhance immune response to disease and treat auto-immunity), clotting factors (used to treat haemophilia or other coagulopathies) and albumin (used to treat fluid loss or supplement hypoalbuminemia) (13). Finally, platelets are particularly used for patients with leukaemia or those going through chemotherapy regimens, whose platelet counts drop to a point where spontaneous bleeding can occur. Platelets can also help stop bleeding during surgery or following major trauma (14).

3.0 Blood donation governance - testing and deferral

All blood donations given to Lifeblood undergo relevant testing and screening to ensure the blood used is suitable and to minimise TTI risk to recipients of a blood product (12). All blood testing and screening is done in licensed facilities approved by the TGA according to principles of good laboratory practice and manufacturing (7,15). Every donation is tested for blood type, red cell antibodies, and infectious diseases such as HIV, Hepatitis B and Hepatitis C that can be spread via blood transfusion (12). First blood donors are screened for Human T-lymphotropic virus, syphilis and Cytomegalovirus. Donations will also be tested for malaria if the donor has travelled to or lived in a malaria-prevalent region (12). The tests include a combination of nucleic acid tests (NAT) and/or serological tests to detect the presence of TTIs (for full list see Appendix 2) (16). Donors are notified of any positive infection results and are recommended to test in an external clinical laboratory as these results are not definitive that the donor has the disease (12).

To maintain the safety and integrity of the Australian blood product supply, donations generally have to pass all 5 following requirements to be certified as usable: donor selection criteria being met, negative viral screening, blood type confirmation, red cell antibody screening, and suitable product quality as per guidelines and specifications. Products that do not meet those requirements are destroyed (5). To minimise unwanted risk to those receiving donated blood, Lifeblood will give eligibility questions, both at the time of booking the donation and while in the donation centre (17). Overarching screening questions are provided on the Lifeblood website in the form of an eligibility quiz, with further discussion of eligibility explored at the time of donation (18).

Those unable to meet the eligibility criteria around tattoos, health conditions, sexual activity, and travel must wait a mandatory deferral period before they can donate blood again to avoid spreading possible infection (17). These deferral periods are updated to suit new research findings around pathogen testing and demand for blood - for example, the deferral period after having a tattoo in a licensed Australian

parlour was reduced from 4 months to 7 days in 2023 (19) For the full list of deferral periods in relation to blood donation please refer to Appendix 3.

Diseases have a 'window period', which is the time between first infection and when the disease can be reliably tested in blood. Window periods range from 3 days to 51 days depending on the infection (20). However, Lifeblood reports that even if these infections are not detected, there is a less than 1 in 1 million chance of infection, which they equate to that of death from a lightning strike (20). A primary reason for deferring donations from high-risk groups is to prevent potentially infected blood, which might not be detected during the window period, from being used (21).

4.0 High risk groups and recipient safety

Though all blood donations undergo screening to minimise TTI risk, people from high-risk groups are often deferred because the incubation period for a blood test from an infected person to be positive can span from a few days to a few months. These high-risk groups include men who have sex with men (MSM), people on PreP (an antiviral medication which reduces the risk of HIV transmission), people with tattoos and piercings, and people who have had sex with someone from a high-risk area or a sex worker (22). Deferral periods are meant to contribute to a safer blood supply, and contribute to Australia having one of safest blood supplies in the world, with the rate of TTIs in the blood supply being around 6 to 64 times lower than in the general population (22). Constant modifications of guidelines are required to ensure that restrictions are based on the most up to date evidence, and limit discrimination against groups that are already at risk. This section will explore what the restrictions on these people are currently, what changes have recently been implemented and what changes are being implemented for these groups.

4.1 MSM

Throughout history, MSM have been victims of discrimination in regards to their rights to donate blood, but constant progress is being made to ensure that this group has the privilege of donating blood, while ensuring that the blood supply remains safe. Currently, in Australia, 49% of HIV notifications were attributed to sexual contact between men compared to the 30% of cases attributed to heterosexual sex. The rest of HIV notifications were attributed as such- 8% to a combination of injecting drug use and sexual contact between men, 3% to injecting drug use alone, and to 10% to other/unspecified (23). Because rates of HIV are higher within the MSM population specific restrictions are placed upon this population. Currently, MSM are subjected to a 3 month deferral period since the last time they had sex with a man (23). The same restrictions apply to all people who have had sex with a MSM.

This 3 month deferral period is meant to reflect the long incubation period for HIV screening, and ensure that if a person has contracted HIV from a sexual encounter, it can be identified by the end of the 3 month deferral period (23).

4.2 People on PrEP

As of the 30th of June 2022, 56,994 people had taken PBS-subsidised PrEP at least once with the vast majority of PrEP users being MSM (21). Although full compliance to a PrEP regime reduced the risk of HIV transmission through sex by 99 percent, Lifeblood places restrictions on PrEP users and blood and plasma donations (24). Indeed, PrEP users need to wait 12 months after their last dose before donating blood and need to wait 3 months after their last dose before donating plasma (25). This is because PrEP decreases the ability of tests to pick up on HIV and increases the risk of false negatives (25).

4.3 Piercings and tattoos

Recently, there have been considerable reductions in the deferral period for people with tattoos, as the deferral period for people who had gotten tattoos in a licensed tattoos parlour was reduced from 4 months to 1 week for donating blood and no time at all for donating plasma (19). This was done to reflect the very minimal risk of contracting Blood Borne Viruses (BBV) including Hep C, Hep B, tetanus and HIV, in a licensed tattoo parlour (26). However, if the tattoo was not done in a licensed tattoo parlour in Australia, a deferral period of 4 months still applies (26).

Similarly, to limit the risk of BBV transmission, there are also restrictions on people who get ear piercings (on the earlobe) and body piercings (any piercing other than an ear piercing), with significantly more restrictions on people who have had body piercings. This is because though little research exists on the risk of ear piercings they are considered to be very low risk, whereas body piercings present and increased risk of Hep B and Hep C transmission, as the OR (Odds Ratio) for Hep B transmission from a body piercing is 1.8 (80 percent increased chance of having Hep B) and the OR for Hep C transmission from a body piercing is 1.83 (83 percent increased chance of having Hep C), the incubation period of 90 days for Hep B testing, and the incubation period of 2-3 months for Hep C testing (27,28). As a result of this evidence, people who get ear piercings can only donate plasma in the first 24 hours after getting a piercing and can donate blood and platelets afterwards. Moreover, people who get body piercings can only donate plasma in the first 4 months of getting a body piercing, before being allowed to donate blood and platelets (26).

4.4 Sex workers and people who have had sex with sex workers

Under Lifeblood's guidelines, a sex worker is defined as someone who has received payment for sex. Both sex workers and people who have had sex with a sex worker are subjected to a 3-month deferral period from their last sexual activity with/ as a sex worker, to reflect the incubation period for TTIs (20). However, this deferral period has been brought into question due to emerging evidence that sex workers have a consistently lower rates of STIs than the general population (29). Indeed, the STI detection rate in female sex workers (2.1–2.6 cases/100 consultations) remained substantially lower in comparison with the heterosexual male (6.4–6.7 cases/100 consultations) and female population (4.8–5.3 cases/100 consultations) (30).

4.5 Population based deferral vs Individual risk assessment

Universal deferral periods reflect a model considered population-based deferral (20). In the example of MSM population, the deferral period does not consider the differences in the risks posed by different MSM individuals. For example, MSM in long-term monogamous relationships, though they might be at significantly lower risk than the general population of having HIV, are still subjected to the 3-month deferral period (31). This is why many countries, including the UK, USA, Spain and Italy are now transitioning away from this model of population based deferral and moving towards an individual risk assessment (32–34). In this model, there is an evaluation of at-risk populations into "low risk" and "high risk" for HIV. For example, a MSM is considered "low risk" for HIV if he is in a long-term monogamous relationship and, on the other hand, a heterosexual man who has had multiple sexual partners and unprotected sex during the last month, is considered a "high risk" candidate (31). This individual risk assessment is considered by many to be less discriminatory as it can assess potential donors regardless of their sexual orientation, and keeps the blood supply safe by deferring donors based on "risky sexual behaviour" instead of blanket population-based deferral (31). Lifeblood is now also moving towards this model, and is presently undertaking a two year research program to assess the suitability of an individual risk assessment in Australia (35).

5.0 Impact of deferral periods and restrictions on high risk groups

The question of whether it is discriminatory to deny individuals from high-risk groups from donating has been tested three times in Australia: at the Victorian Civil and Administrative Tribunal (1998), the Human Rights and Equal Opportunity Commission (2007) and the Tasmanian Anti-Discrimination Tribunal (2009). In all three cases, the deferral policy was found not to constitute discrimination; blood

donation was characterised as a gift that could be refused, as opposed to a right (36,37).

Perspective of the Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Aromantic/Asexual, Sistergirl, Brotherboy (LGBTQIASB+) community in the modern age, there is perception that the deferral periods are discriminatory. One study surveying Gay and Bisexual Men (GBM) found that 74.3% of all respondents thought that the deferral period for MSM was homophobic, 80.6% indicated the rule was unfair, and 85.1% indicated that the rule was too strict as some sex is safe (38). The previous 12 month deferral period also affected the communities willingness to donate: 94.1% were unwilling to abstain from sex for twelve months in order to qualify for donation, but 95.2% said that if the deferral period were lowered, they would most likely donate (38). This policy calls upon updated research describing the current views on the recently updated 3-month deferral period (39). Some commentary has also noted a perceived bias in a blanket deferral on MSM that implies they are perceived as less likely to disclose their behavioural risk factors for blood-borne infection (39). Whilst globally there is some evidence of this, in analysing the Australian experience, extremely high compliance (99.7%) is seen with the current policies (40).

Under the new Australian plasma donation criteria, 73.6% of GBM were estimated to be eligible. Only 40.2% are eligible to donate blood in respect to the current guidelines, with 21% of MSM ineligible due to the 3 month deferral period and only 16.1% knowing about the reduction in the deferral period from 12 months to 3 months in January 2021 (41). Research could potentially explore the significance of communication as an essential part of these strategies implemented in order for them to be effective. In 2018, 77.7% of MSM reported they would likely donate blood if the deferral period was not 12 months, with a high willingness and desire to donate. This policy calls upon updated research describing the current views on the recently updated 3 month deferral period and the return rate of GBM to donation centres following the update (41).

The blanket ban on MSM donating blood originated from a different epidemiology and landscape, which came with its own stigma and beliefs that carry into today despite the change in prevalence. HIV is still used to pathologise LGBTQIASB+ relationships and contribute to homophobia that grows in Australia, stemming from the rhetoric of being the ‘gay man plague’ from the AIDS epidemic. The rate of HIV diagnosis among Australian-born MSM has declined over 44% in the past 5 years leading to a current prevalence of 7.3% among MSM living in Australia (42). Presently, 95% of Australians living with HIV are on treatment and have an

undetectable viral load, meaning HIV cannot be transmitted to other sexual partners (43).

Sex workers face significant stigma due to the deferral period for blood donation, which stems from systemic misconceptions about their health and wellbeing. Epidemiological data from 2001-2009 shows that sex workers have consistently low rates of HIV of less than 1% as well as a rate of 0.1/100 person-years for HIV transmission (29). However, mandatory testing laws in some states, which require sex workers to disclose their health status to partners and prohibit them from working if they have an STI or HIV exacerbate this stigma. These laws alienate sex workers, impede health promotion, and increase discrimination from partners, the public, and health providers. Current mandatory testing is based on false perceptions rather than evidence (29). It ignores that sex workers regularly practice safe sex and educate clients and peers on risk management. The testing policies assume all sex work involves penetrative sex, failing to recognize the diversity of services provided, many of which involve minimal or no risk. Additionally, mandatory testing is invasive, expensive, and places undue strain on health resources without improving outcomes. It perpetuates the stereotype of sex workers as diseased and undermines their autonomy and empowerment (29).

6.0 Contemporary strategies for promoting and utilising blood donation

6.1 Attracting and retaining donors

To understand how best to increase blood donation, it is crucial to understand the underlying motivations from the public for doing so, improving recruitment and retention. Some key areas have been highlighted from which to boost donation numbers: illustrating the impact of the donation to play into public altruism, use of social media for promotion, offering incentives and making donation accessible and convenient (44).

In some countries, donors are compensated financially, yet Australia's system relies on volunteerism, and international studies indicate that payments could deter the altruistic donors essential to our system (45). Research conducted by Lifeblood revealed that nearly 90% of Australian donors exhibit "impure altruism", meaning they donate blood to help others but also are motivated by the personal satisfaction of doing good (45). Existing research suggests that cash incentives would jeopardise altruistic donations and diminish the "warm glow" derived from giving back to others (45).

However, Lifeblood studies have demonstrated that additional recognition, such as optional gifts, does not conflict with donors' altruistic identities, presenting a potentially viable approach to encouraging more frequent donations (45).Although the evidence on the effectiveness of gifts and rewards is still emerging, it is promising. This concept is generally well-received, with 70% of Australian donors supporting increased recognition (45). Thus was born the 'Lifeblood Gifts' initiative, which launched in 2023, inviting donors to receive a gift every three donations they make, such as branded keep cups, drink bottles, beanies and more (46). Prior to the 'Gifts' initiative, Lifeblood has provided an enjoyable donation experience to donors, offering free snacks, drinks, wifi and often donor parking at their centres (46).

Moreover, another strategy that has been found to be effective is competition. A study on the annual Vampire Cup competition conducted by former Monash University student, Jack Bryant, found that competition was a strong motivator for 76% of student donors, along with peer-led recruitment and leveraging existing rivalries between institutions (47). The Vampire Cup is an annual AMSA-led blood donation drive in which Australian medical schools compete to see who can donate the most blood products. Students promote the competition to their cohort of medical students using social media campaigns and sponsorships. The competition led to an increase in recruitment of adult donors, however following the competition donation frequency reverted to that of the control group (47).

In terms of retaining existing donors, Lifeblood employs numerous strategies to maintain active relationships with their previous donors. For instance, follow-up calls are made when it is time to book new appointments, reminder texts sent prior to appointments and "thank you" messages after donations, along with urgent calls when specific blood types are in need or around holiday periods when donation volumes fall (46).

6.2 Decreasing restriction and increasing potential donors

Lifeblood is currently working on a revolutionary new method to increase the number of people who can donate blood- the plasma pathway. In addition to this, Lifeblood makes consistent efforts to modify their risk-screening questionnaire. A significant factor in this is making sure that risk assessment interviews remain acceptable to maximise the number of people who return to donate. This section will cover both the plasma pathway and how risk assessment interviews can be made more acceptable.

Plasma pathway

On 25 May 2023 the TGA approved applications submitted by Lifeblood to remove most of the sexual activity ineligibility criteria for plasma donors (48). This is because all fractionated plasma products in Australia (Albumin, clotting factor concentrates and immunoglobulins which are products that can be isolated from blood plasma) are heavily processed through viral filters to remove viruses and other methods to inactivate viruses- thereby significantly reducing the risk of HIV transmission to a patient (31). This revolutionary method, which Australia would be the first to implement, would allow many groups that are currently restricted or deferred to donate plasma (48). These groups, detailed on the Lifeblood website (25), are:

- for male donors: male-to-male sex
- for female donors: sex with a man who has ever had sex with a man
- for transgender donors: sexual contact with a male
- sex work
- sexual contact with a sex worker (male or female)
- overseas sexual contact with a resident of a HIV high prevalence country
- sexual contact with a new partner from a HIV high prevalence country
- sexual contact with an injecting drug user (current or past)
- People on PrEP

Making risk assessment interviews more acceptable

Another new initiative to increase blood donation is the proposed shift from population-based deferral periods to an individual risk assessment. Whilst research is ongoing for the application of a risk assessment in Australia, it is important that the best methodology for asking risk assessment questions is explored and understood (31). Though there is very limited research on how to make risk assessment interviews more acceptable, a limited Canadian study showed that potential blood donors felt a lot more comfortable when the an explanation was provided as to why the questions were being asks, donors were forewarned about the questions, ambiguity in the questions was reduced and a self-administered questionnaire was used (49).

6.3 Optimisation of utilising blood products

The Victorian state government has partnered with Lifeblood to create the 'Blood Matters Program', which sets up and annually creates general principles for conserving and managing blood products (50). For example, O- blood is an exceptionally important blood type as it is a 'universal donor'. Because of this, it is used in emergency situations when a patient's blood type cannot be ascertained. However, O- blood can be in shortage for those who are type O- as they can only

receive that type of blood. Thus, the Program's 2024 audit set out guidelines for managing O- blood so that there is enough supply for those who need it (51).

The National Blood Authority is a statutory agency founded in 2003 which manages and coordinates donated blood supply and relevant services. It is engaged in research to consistently improve the blood product system, and aims to make the blood supply as safe and efficient as possible (52).

References

1. Learn about blood | Lifeblood [Internet]. [cited 2024 Jun 9]. Available from: https://www.lifeblood.com.au/blood/learn-about-blood

2. Why donate blood | Lifeblood [Internet]. [cited 2024 Jun 9]. Available from: https://www.lifeblood.com.au/blood/learn-about-blood/why-donate-blood

3. 2023 Lifeblood Stats and Snacks | Lifeblood [Internet]. [cited 2024 Jun 9]. Available from: https://www.lifeblood.com.au/news-and-stories/vital-reads/2023-stats-and-snacks

4. Australian Red Cross [Internet]. [cited 2024 Jun 9]. Annual Report 2021-22. Available from: https://www.redcross.org.au/annualreport2022

5. Blood and blood products in Australia [Internet]. Australian Government Department of Health and Aged Care; 2020 [cited 2024 Jun 9]. Available from: https://www.health.gov.au/topics/blood-and-blood-products/blood-and-blood-products-in-australia

6. National Stewardship Program | National Blood Authority [Internet]. [cited 2024 Jun 9]. Available from: https://www.blood.gov.au/supply-system/managing-blood-supply/national-stewardship-program

7. Regulation of blood | Therapeutic Goods Administration (TGA) [Internet]. Therapeutic Goods Administration (TGA); 2022 [cited 2024 Jun 9]. Available from: https://www.tga.gov.au/regulation-blood

8. Blimey! UK blood and plasma donors exceed expectations after 'mad cow' rule change | Lifeblood [Internet]. [cited 2024 Jun 9]. Available from: https://www.lifeblood.com.au/news-and-stories/media-centre/media-releases/uk-blood-and-plasma-donors-exceed-expectations-after-mad-cow-rule-change

9. Changes to blood and plasma donation in 2024 | Lifeblood [Internet]. [cited 2024 Jun 9]. Available from: https://www.lifeblood.com.au/news-and-stories/media-centre/media-releases/changes-blood-and-plasma-donation-in-2024

10. Making your donation | Lifeblood [Internet]. [cited 2024 Jul 15]. Available from: https://www.lifeblood.com.au/blood/making-your-donation

11. Prepare and aftercare | Lifeblood [Internet]. [cited 2024 Jul 15]. Available from: https://www.lifeblood.com.au/blood/making-your-donation/prepare-and-aftercare

Head Office
A Level 1,
39 Brisbane Avenue,
Barton, ACT 2600

Postal Address
PO Box 6099,
Kingston, ACT 2604

ABN:
67079 544 513

Email:
info@amsa.org.au

Website:
www.amsa.org.au

12. Testing donated blood so it's safe| Lifeblood [Internet]. [cited 2024 Jun 9]. Available from: https://www.lifeblood.com.au/blood/blood-testing-and-safety

13. Making blood components | Lifeblood [Internet]. [cited 2024 Jul 15]. Available from: https://www.lifeblood.com.au/patients/blood-for-transfusion/making-blood-components

14. What are platelets? | Lifeblood [Internet]. [cited 2024 Jul 15]. Available from: https://www.lifeblood.com.au/blood/learn-about-blood/platelets

15. Donation testing | Lifeblood [Internet]. [cited 2024 Jun 9]. Available from: https://www.lifeblood.com.au/health-professionals/testing/donation

16. Blood Component Information [Internet]. Life Blood; 2020 p. 52. Report No.: 1. Available from: https://www.lifeblood.com.au/sites/default/files/resource-library/2021-12/78.-Blood_Component_Information_1.pdf

17. Healthdirect [Internet]. Healthdirect Australia; 2024 [cited 2024 Jun 9]. Blood donation. Available from: https://www.healthdirect.gov.au/blood-donation

18. Eligibility | Lifeblood [Internet]. [cited 2024 Jul 15]. Available from: https://www.lifeblood.com.au/blood/eligibility

19. Lifeblood tattoo deferral change | National Blood Authority [Internet]. [cited 2024 Jun 9]. Available from: https://www.blood.gov.au/lifeblood-tattoo-deferral-change

20. The risks of transfusion-transmissible infections (TTI) | Lifeblood [Internet]. [cited 2024 Jun 9]. Available from: https://www.lifeblood.com.au/health-professionals/clinical-practice/adverse-events/other-transfusion-transmitted-infections/transfusion-transmissible-infections

21. Transfusion-transmissible infections in Australia Surveillance Report 2019 | Kirby Institute [Internet]. 2019 [cited 2024 Jun 9]. Available from: https://www.kirby.unsw.edu.au/research/reports/transfusion-transmissible-infections-australia-surveillance-report-2019

22. Transfusion-transmissible infection surveillance report | Lifeblood [Internet]. [cited 2024 Jun 9]. Available from: https://www.lifeblood.com.au/health-

professionals/clinical-practice/adverse-events/other-transfusion-transmitted-infections/transfusion-transmissible-infection-surveillance-report

23. King J, McManus H, Kwon A, Grey R, McGregor. HIV in Australia. Health Equity Matters; 2023.

24. Pre-Exposure Prophylaxis (PrEP) | HIV Risk and Prevention | HIV/AIDS | CDC [Internet]. 2023 [cited 2024 Jun 9]. Available from: https://www.cdc.gov/hiv/risk/prep/index.html

25. Sexual activity | Lifeblood [Internet]. [cited 2024 Jun 9]. Available from: https://www.lifeblood.com.au/blood/eligibility/sexual-activity

26. I have a tattoo or piercing. Can I donate? | Lifeblood [Internet]. [cited 2024 Jun 9]. Available from: https://www.lifeblood.com.au/faq/eligibility/lifestyle-and-identity/tattoo-or-piercing

27. Department of Health. Victoria A. Hepatitis C [Internet]. State Government of Victoria, Australia; [cited 2024 Jun 9]. Available from: https://www.health.vic.gov.au/infectious-diseases/hepatitis-c

28. Yang S, Wang D, Zhang Y, Yu C, Ren J, Xu K, et al. Transmission of Hepatitis B and C Virus Infection Through Body Piercing: A Systematic Review and Meta-Analysis. Medicine (Baltimore). 2015 Nov;94(47):e1893.

29. Jeffreys E, Fawkes J, Stardust Z. Mandatory Testing for HIV and Sexually Transmissible Infections among Sex Workers in Australia: A Barrier to HIV and STI Prevention. World J AIDS. 2012;02(03):203–11.

30. Chow EPF, Fehler G, Chen MY, Bradshaw CS, Denham I, Law MG, et al. Testing Commercial Sex Workers for Sexually Transmitted Infections in Victoria, Australia: An Evaluation of the Impact of Reducing the Frequency of Testing. Consolaro MEL, editor. PLoS ONE. 2014 Jul 21;9(7):e103081.

31. NewsGP [Internet]. [cited 2024 Jun 9]. newsGP - Potential blood donation changes for MSM. Available from: https://www1.racgp.org.au/newsgp/clinical/potential-blood-donation-changes-for-msm

32. Karamitros G, Kitsos N, Karamitrou I. The ban on blood donation on men who have sex with men: time to rethink and reassess an outdated policy. Pan Afr Med J. 2017;27:99.

33. Maddox V, Vallely P, Brailsford SR, Harvala H. Virological safety of the UK blood supply in the era of individual risk assessments and HIV PrEP. Transfus Med Oxf Engl. 2023 Oct;33(5):372–8.

34. www.aabb.org [Internet]. [cited 2024 Jun 9]. Blood Donation by Gay and Bisexual Men. Available from: https://www.aabb.org/for-donors-patients/about-blood-donation/blood-donation-by-gay-and-bisexual-men

35. Update on sexual activity blood donation rules | Lifeblood [Internet]. [cited 2024 Jun 9]. Available from: https://www.lifeblood.com.au/news-and-stories/media-centre/media-releases/update-on-sexual-activity-blood-donation-rules-dec-22

36. Victorian Civil and Administrative Tribunal Act 1998 [Internet]. [cited 2024 Jun 9]. Available from: https://www.legislation.vic.gov.au/in-force/acts/victorian-civil-and-administrative-tribunal-act-1998/138

37. Australia court rules Red Cross not required to accept blood from homosexual donors [Internet]. 2009 [cited 2024 Jun 9]. Available from: https://www.jurist.org/news/2009/05/australia-court-rules-red-cross-not/

38. Clackett S, Seed CR, Prestage G, Hammoud MA, Hoad V, Saxton P, et al. Attitudes and willingness to donate blood among gay and bisexual men in Australia. Transfusion (Paris). 2020 May;60(5):965–73.

39. Power J. The Conversation. 2016 [cited 2024 Jun 9]. Restricting gay men from donating blood is discriminatory. Available from: http://theconversation.com/restricting-gay-men-from-donating-blood-is-discriminatory-61021

40. Seed CR, Lucky TT, Waller D, Wand H, Lee JF, Wroth S, et al. Compliance with the current 12-month deferral for male-to-male sex in A ustralia. Vox Sang. 2014 Jan;106(1):14–22.

41. Mowat Y, Hoad V, Masser B, Kaldor J, Heywood A, Thorpe R, et al. The impact of blood donation deferral strategies on the eligibility of men who have sex with men

and other sexual risk behavior in Australia. Transfusion (Paris). 2024 Mar;64(3):493–500.

42. Ung M, Martin S, Terris-Prestholt F, Quaife M, Tieosapjaroen W, Phillips T, et al. Preferences for HIV prevention strategies among newly arrived Asian-born men who have sex with men living in Australia: A discrete choice experiment. Front Public Health. 2023 Mar 13;11:1018983.

43. HIV By Numbers: Global HIV Statistics [Internet]. Ending HIV. 2020 [cited 2024 Jun 9]. Available from: https://endinghiv.org.au/blog/hiv-by-numbers/

44. Cowgill A. The 5 Best Ways To Motivate Gen Z To Donate Blood — Incept Saves [Internet]. [cited 2024 Jun 9]. Available from: https://www.inceptsaves.com/blog/the-5-best-ways-to-motivate-gen-z-to-donate-blood

45. What would it take to get you to donate blood regularly? | Lifeblood [Internet]. [cited 2024 Jun 9]. Available from: https://www.lifeblood.com.au/news-and-stories/trending-research/donor-research/what-would-it-take-get-you-donate-blood-regularly

46. Lifeblood Gifts | Lifeblood [Internet]. [cited 2024 Jun 9]. Available from: https://www.lifeblood.com.au/blood/lifeblood-gifts

47. Bryant J, Woolley T, Sen Gupta T, Chell K. Using competition for plasma donor recruitment and retention: An Australian university case study. Vox Sang. 2024 Feb;119(2):155–65.

48. Lifeblood sexual activity and PrEP deferrals | Therapeutic Goods Administration (TGA) [Internet]. Therapeutic Goods Administration (TGA); 2023 [cited 2024 Jun 9]. Available from: https://www.tga.gov.au/news/news/lifeblood-sexual-activity-and-prep-deferrals

49. Haw J, Woo H, Kohut T, Fisher W. Sexual risk behavior questions: Understanding and mitigating donor discomfort. Transfusion (Paris). 2022 Feb;62(2):355–64.

50. Department of Health. Victoria [Internet]. State Government of Victoria, Australia; 2024 [cited 2024 Jun 9]. Blood Matters Program. Available from: https://www.health.vic.gov.au/patient-care/blood-matters-program

51. Department of Health. Victoria [Internet]. State Government of Victoria, Australia; 2024 [cited 2024 Jun 9]. Blood Matters audits. Available from: https://www.health.vic.gov.au/patient-care/blood-matters-audits

52. Role of the NBA | National Blood Authority [Internet]. [cited 2024 Jun 9]. Available from: https://www.blood.gov.au/role-nba

53. Annual reports | Lifeblood [Internet]. [cited 2024 Jul 16]. Available from: https://www.lifeblood.com.au/about/our-strategy/annual-reports

Appendix

Appendix 1

Annual blood donor and donation numbers 2015-2019		
Year	**Donors**	**Donations Made**
2023-2024	Information not available yet	1,633,788
2022-2023	524,258	1 499 135
2021-2022	521,000	1,596,803
2020-2021	502, 018	1 596 803
2019-2020	506,985	1,493,675
2018-2019	523,688	1 427 659

(53)

Appendix 2

TTI testing conducted on blood product donations	
Donations used to manufacture clinical blood component	**Apheresis plasma donations used to supply plasma for fractionation**
• Hepatitis B virus (HBV) D • Human immunodeficiency virus-1 (HIV 1) • Hepatitis C virus (HCV) • Syphilis • Human T-cell lymphotropic virus-I/II (HTLV-I/II) for new donors donations used to manufacture white blood cells • Selected components (approximately 25 per cent) are tested for antibodies to cytomegalovirus (CMV). • Certain donations are also tested for malaria • All platelets manufactured are screened for bacterial contamination.	• Hepatitis B virus (HBV) • Human immunodeficiency virus (HIV) • Hepatitis C virus (HCV)

(16)

Head Office
A Level 1,
39 Brisbane Avenue,
Barton, ACT 2600

Postal Address
PO Box 6099,
Kingston, ACT 2604

ABN:
67079 544 513

Email:
info@amsa.org.au

Website:
www.amsa.org.au

Appendix 3

Summary of Deferral Periods for Australian Red Cross Lifeblood		
Blood donation Deferral Criteria	**Deferral Based on risk to donor**	**Deferral based on risk to blood supply**
Age: <18	Unable to give legal consent	
Alcohol intoxication	Alcohol affects ability to give informed consent, must wait until completley sober	
Iron deficiency Anaemia	Blood donation causes a drop in blood Hb. Fe deficiency + Hb drop could reach critical levels. Must wait until iron levels are normal	
Angina	Must be asymptomatic for at least 6 months	
Antibiotic use		Must wait 5 days after finishing the full course. Eligibility for prophylactic antibiotics in most cases
Professional athletes	Recommended against donation, as this may temporarily affect performance	
Bleeding disorders	Excessive bleeding may result from needle placement - case by case basis	
Blood pressure	Must be stable, adequately controlled and no side effects from medication	
Recent blood transfusion	Must wait 12 months since receiving non-autologous transfusion	
Breastfeeding/childbirth	Must wait 9 months and when baby is significantly weaned	
Cancer		Must remain cancer-free for 5 years post treatment

Chicken pox		Can donate plasma 4 weeks after complete recovery
Chlamydia		Must wait until fully recovered (~2 weeks) and another 5 days post completion of treatment
Chronic fatigue syndrome		Unknown cause - may be transmissible
Cold sores		Able to donate if there is no current episode and previous sores must be clean and dry
Common cold		Must be fully recovered - even if mild symptoms
cCJD (family diagnosis)		Permanent deferral due to potential of familial transmission. Decade long disease course.
Cystic fibrosis	Permanent deferral due to recurrent chest infections and anaemia is common	
Dengue fever		Must wait 4 months post recovery
Dental treatment		Maximum deferral is 7 days depending on treatment
Diabetes	Only allowed if no macro/microvascular complications	
Diarrhoea		Depends on the cause - usually a 1-4 week deferral post recovery
IVDU		5 year donation deferral
DVT	Dependent on treatment/recurrences/cause	

Ebola contact		8 week deferral
Eczema	Rash can't be inflamed, weeping or affect site of blood drawing	
Endoscopy		7 days post procedure, providing results are normal
Epilepsy	Eligible provided no seizures in previous 3 years	
Fibromyalgia		12 months asymptomatic + non-medicated - cause unknown
EBV		2 weeks post recovery
Heart attack	6 months postmyocardial infarction + asymptomatic	
Heart surgery	6 months post surgery + asymptomatic	
H. pylori		5 days post treatment + asymptomatic
Hepatitis A + B		12 months post recovery
Hepatitis C		Not eligible
Herpes		Provided non-current infection
Influenza-like illnesses		2 weeks post recovery, especially with fever
Occupational lead exposure		Ineligible - lead harmful to children if transfused
Leukaemia/lymphoma		Permanent ineligibility
SLE	Ineligible - affects severity of SLE	
MS		Ineligible - reason unknown

Pacemaker	6 months post-pacemaker insertion	
Piercings		Ear piercings = plasma after 24 hours. All other = plasma only for 4 months then fully eligible afterwards
Polycythaemia (rubra) vera	Regular venesections are common. Cannot donate to patients	
Miscarriage	Must wait 6-9 months to allow body to replenish iron stores (depending on trimester of pregnancy)	
Pregnancy	Ineligible - stress to foetus	
Imprisonment		12 months from leaving. Applies if >72 hours in prison
Sexual activity: MSM, sex workers, high HIV risk country sexual partners, sex with IVDU, transgender, women who have sex with MSM		Ineligible for 3 months (very soon they will be able to donate plasma immediately via the 'plasma pathway')
Shingles		4 weeks post rash recovery
Splenectomy	Must be 6 months post full recovery	
Stroke	Ineligible	
Tattoo		4 months post tattoo if not done in a licensed tattoo parlour in Australia. If done in a licensed parlour, there is no deferral for plasma and 1 week deferral for blood and platelets

Travel		4 weeks to 4 months depending on country of origin
Live vaccines		No deferral for plasma but must wait 4 weeks for blood and platelets if no symptoms
COVID-19 vaccine		3 days post vaccination
Hepatitis B vaccine		2 weeks post vaccination
HPV		Eligible as long as no broken skin or local infection
Weight	Must be at least 50kg. Maximum weight varies on strength of donor couch but is usually 200kg	

(1,2)

Policy Details:

Name: Blood Donation

Category: F – Public Health in Australia

History: Reviewed Council 2, 2024

Sylvia Sherborne (Lead Policy Author), Benjamin Gelb, Siva Nachiappan, and Eloise Fleming; with Imogen Bowden (National Policy Mentor), Jonathon Bolton (National Policy Officer), and Harry Luu (National Policy Secretary)

Reviewed, Council 2, 2020

Felix Altit, Leo Dunstan-Potter, Mikaela Dunn, Rebecca Goodall, Allen Gu, Heather McNeil, Stuart Purdie, Guy Jeffery (Global Health Policy Officer)

Reviewed, Council 1, 2017

Ned Latham, Sophie Lassila, Isabella Watts, Amy Yang, Phoebe McIntosh-Evans (Policy Officer)

Adopted, Council 3, 2014

Head Office
A Level 1,
39 Brisbane Avenue,
Barton, ACT 2600

Postal Address
PO Box 6099,
Kingston, ACT 2604

ABN:
67079 544 513

Email:
info@amsa.org.au

Website:
www.amsa.org.au