



INTERVAL STUDY CONSENT FORM

Blood Donor ID number:

Please tick (✓) each box if you agree with the statement:
You must tick all of the boxes to be eligible to take part in the study

- 1 I confirm that I have read and understood the information leaflet dated 20.04.12 (Version 4.1) for the above study. I have had the opportunity to ask questions, and these have been answered fully.
- 2 I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.
- 3 I understand and grant permission for relevant sections of my blood donation records to be retrieved and used by the study team.
- 4 I give permission for long-term, anonymised storage of my blood samples (including DNA) for health-related research purposes (even after my incapacity or death), and relinquish all rights to these samples which I am donating to the study.
- 5 I understand that information held by the NHS and records maintained by the NHS Information-Centre and the NHS Central Register may be used to provide information about my health status and I give permission for long-term anonymised storage and use of this and other information about me, for health-related research purposes only (even after my incapacity or death).
- 6 I agree to provide an email address and for my contact phone details being given to members of the study team, to send me communications about the study. I will maintain the email address provided or, if necessary, supply a new one in the future.
- 7 I understand that none of my results (other than those which have an immediate impact on my healthcare) will be given to me and that I will not benefit financially from taking part (e.g. if research leads to commercial development of a new treatment or blood test).
- 8 I agree to take part in the above study.

a study of **blood donation frequency**



INFORMATION LEAFLET



The **INTERVAL** Study

University of Cambridge - Department of Public Health and Primary Care
Wort's Causeway - Cambridge - CB1 8RN

A. N. Sample

A N Sample

10/10/12

Participant Name

Signature

Date

20.04.12 (Version 4.1)

For further information about the INTERVAL study, please call the freephone number on: 0800 064 0089 or email helpdesk@intervalstudy.org.uk or look at the project website www.intervalstudy.org.uk.

Email: helpdesk@intervalstudy.org.uk
www.intervalstudy.org.uk
Freephone: 0800 064 0089
Mon to Fri: 9:00 - 17:00

INTERVAL



a study of **blood** donation frequency



We would like to invite you to join the INTERVAL study which has been set up by the Universities of Cambridge and Oxford in collaboration with NHS Blood and Transplant (NHSBT).

We are carrying out a study of 50,000 blood donors to compare different intervals between blood donations. Our goal is to find the optimum interval for which it is safe for different donors to give blood. We will want to look at whether intervals should be tailored to donors by age, gender, genetic profile and other characteristics. The study's findings should help to improve the well-being of future blood donors in England and enhance the country's blood supplies.

Before you decide whether to participate, it is important for you to understand why the study is being conducted and what is involved. Please take the time to read the following information carefully, and discuss it with others if you wish.

If anything is not clear, or if you would like more information, please call the freephone number on **0800 064 0089** to talk to a member of our study team or email helpdesk@intervalstudy.org.uk. More information about the study is also available at:

www.intervalstudy.org.uk

At your next donation visit, there will be a further opportunity to ask any questions that you might have.

Thank you for taking the time to consider taking part in the INTERVAL study.

Why is the study needed?

Because shortages in the blood supply are projected for England, NHSBT is exploring different approaches to ensure adequate blood supplies for the future.

One way to increase the blood supply is to ask blood donors to give blood more frequently. However, some time is required between blood donations to allow the body to replace its iron stores.

Because no one knows what is the optimum interval between donations, blood donation services in different countries have developed varying customs. In England, NHSBT invites men to donate every 12 weeks and women to donate every 16 weeks. By comparison, some European countries invite people to donate blood as frequently as every 8 weeks.

The INTERVAL study aims to recruit about 25,000 men and about 25,000 women from NHSBT blood donation centres across England. If you choose to join this study, you will take part for a period of two years. During this time we will invite you to give blood either at your usual donation interval or more frequently. Men will be invited to donate every 8, 10 or 12 weeks and women every 12, 14 or 16 weeks. The donation interval you are allocated to will be decided by a process called 'randomisation', which is like a coin toss (**see box below**). As usual, you will be able to give blood only if you pass the screening haemoglobin finger-prick test.

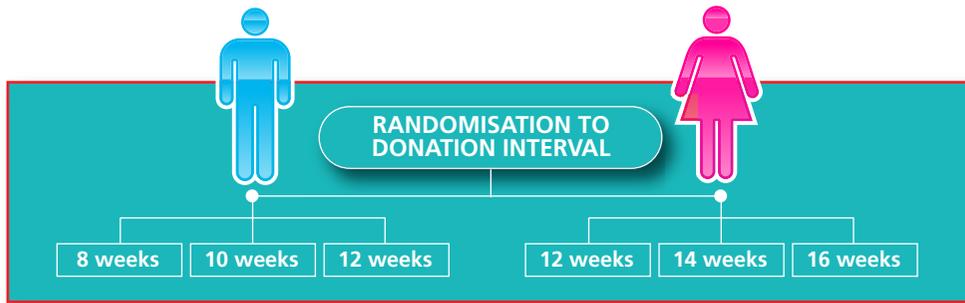
At the end of the study, we will compare the amount of blood donated and measures of well-being in people asked to give blood at standard intervals versus those asked to give blood more frequently.

To find out whether certain people have capacity to give blood more frequently, we will be collecting an additional small blood sample at the beginning and end of the study to look at iron levels and DNA for relevant genes. Not all of the blood sample will be used immediately and some will be stored so that it can be used to assist future studies about the health of blood donors.

Randomisation: means you will have an equal chance of being allocated to any one of three donation interval groups.

You will not be able to choose the interval you would prefer.

So before you agree to join the study, it is **important you are willing to be invited to donate at any of the three intervals.**



What does taking part in the study involve?

Taking part in the INTERVAL study would involve you:

- Being asked to attend donation appointments either at standard intervals between donations (i.e. 12 weeks for men and 16 weeks for women) or reduced intervals (i.e. either 10 or 8 weeks for men and 14 or 12 weeks for women) over a two-year period.
- Giving a small sample of blood for research purposes on your enrolment to the study and after two years. For some participants, further small samples of blood for research will be taken at additional time-points during the two-year period. This will not involve any additional needles.
- Completing online questionnaires and assessments every six-months during the study.
- Agreeing to give the INTERVAL study team permission to access your medical and other health-related records and for long-term anonymised storage and use of this information for future ethically-approved health-related research purposes only.
- Agreeing to have your samples, questionnaire data, health-related and other information stored by the INTERVAL study team and used, for many years, in an anonymous form by researchers for a broad range of ethically-approved scientific health studies.
- Being contacted, no more than three times a year, by the INTERVAL study team about further studies organised by NHSBT and/or Universities of Cambridge and Oxford. These studies will build on results and samples generated from the INTERVAL study to further understand the links between lifestyle, genes, traits and diseases. It is completely up to you if you would like to take part in further studies or not.

Why have I been invited and am I eligible?

We are inviting all blood donors who usually give blood at one of the permanent donation centres across England.

You are eligible to take part in the study if you:

- Are aged 18 or over.
- Are a whole-blood donor who usually gives blood at one of the permanent donation centres across England.
- Fulfil all normal criteria for blood donation.
- Are willing to be assigned to any of the study's donation intervals relevant to your gender.

You are not eligible to take part in the study if you:

- Do not have internet access or are unable to provide an email address for study correspondence.

Do I have to take part?

No, it is completely up to you. If you decide to take part you will be asked to sign a consent form at your next donation visit (see a sample copy of the consent form at the end of this leaflet). You are free to withdraw at any time, without giving a reason. Your decision has no influence on your blood donation or your choice to donate in the future.

What should I do if I want to take part?

If you would like to join the study, then all you need to do is to take this information leaflet and the accompanying invitation letter to your next donation appointment. Here you will be asked if you would like to take part and you will have the opportunity to ask any further questions.

What happens DURING my next donation visit?

Regular NHSBT staff at your donation centre will:

- Ask if you have received and understood this information leaflet and whether you would like to take part in the study. You will also have the chance to ask any questions that you might have before deciding whether to join.
- Assess whether you are eligible to join the study and, if you are, ask you to sign a study consent form. An example of this consent form is included at the back of this leaflet. As part of the consent process we will ask you to provide an email address and contact mobile phone number at which the study team may contact you.
- Collect about 15 ml of extra blood (approximately 3 teaspoons) for research from the sample pouch of the routine donation pack. No additional needles will be used.

What will happen to my blood samples?

Blood samples collected for the purposes of the research will either be used immediately, i.e. to perform a full blood count and measure substances related to your body's iron stores (e.g. ferritin) or will be frozen for use in future research. Stored samples will include separate components of your blood (e.g. plasma, serum and DNA) which will be:

- Kept securely at central laboratories. They will not be labelled with your name or contact details, but only with a unique study number.
- Used by the study investigators for medical and health-related studies which have relevant scientific and ethics approval.
- Used to measure biomarkers, which are substances in the body (e.g. haemoglobin) that can easily be measured and give a clue to health (e.g. iron deficiency).

- Used to study your DNA and related substances. In particular, we want to know how genes regulate blood cells. Variations in genes influence the behaviour of the blood cells and so we need to analyse your DNA in detail. As part of this study, we will test your DNA for many genes and we may determine the sequence of part of or your entire DNA code.



What happens immediately after I enrol?



A few days after enrolling in the study, we will send you an email containing a link to an online questionnaire. We would like you to complete this questionnaire within 7 days of receiving the email. The questionnaire will take about 15 minutes to complete and will ask you questions about your general health and lifestyle (e.g. smoking and diet). The data we collect will be stored securely and will contain no personal identifiers.

Once we have received your completed questionnaire, we will send you a further email. This will let you know the donation interval to which you have been randomly assigned. This information will also be given to NHSBT so they know you are taking part in the study and can make appointments at the required intervals.

What happens next?

Every six months we will send you an email requesting you to:

- Complete a very brief online questionnaire (taking less than 5 minutes) which will ask you to rate your general health.
- Report any medical events and/or any symptoms while you are taking part in the study.

At the end of the study we will also ask you to complete an online:

- Questionnaire about your general health which will take about 10 minutes to complete.
- Questionnaire about your views on donation and taking part in the research. We estimate that this questionnaire will take about 5 minutes for you to complete.
- Assessment including memory and attention-related tasks. We estimate this assessment will take about 10 minutes for you to complete.

At the end of the study there will also be the option for some blood donors, attending pre-selected donor sessions, to:

- Take part in one-to-one interviews to obtain views on giving blood and participation in the research.
- Take home and wear devices to measure physical activity over a period of 7 days.

Information on your future health will be accessed by INTERVAL researchers from your routine medical and other health-related records at the time of joining the study and from time to time thereafter.

To be able to retrieve relevant health information we use your NHS number.

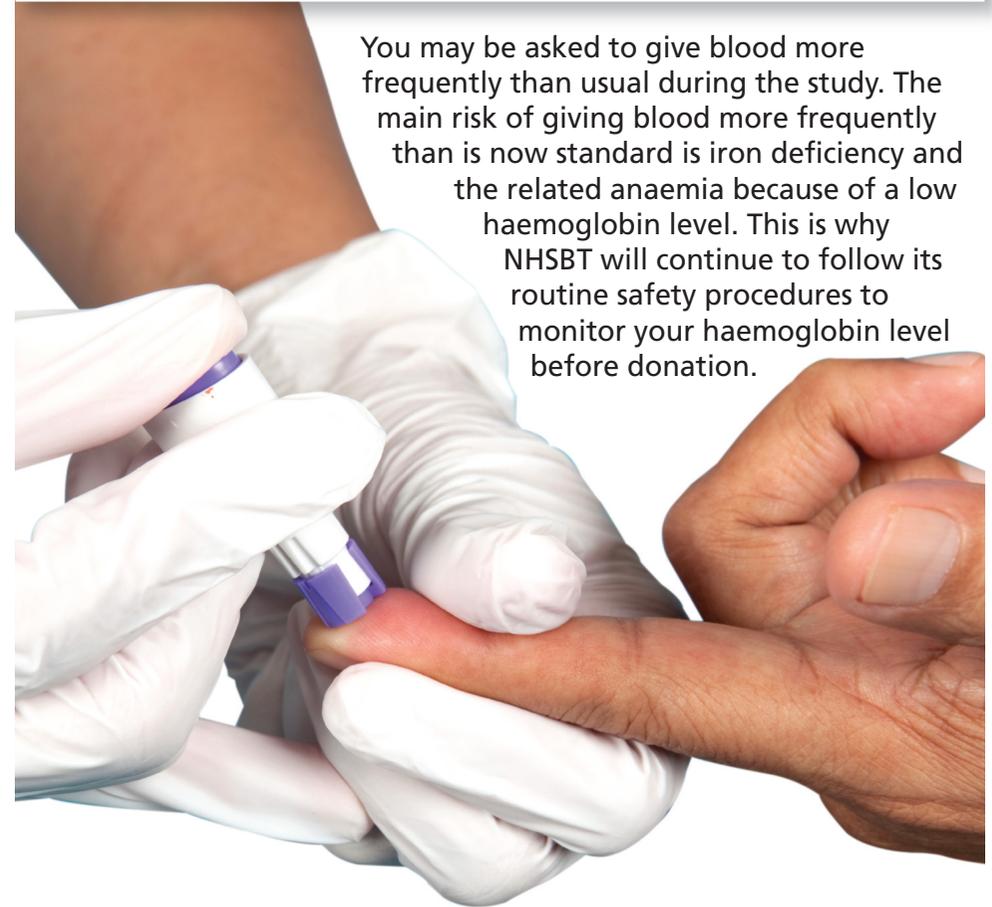


Are there any benefits for me in joining the study?

There will be no immediate direct benefit to you should you participate. However, there should be benefits to future blood donors and to the country's future blood supply because the results of the study are likely to influence how NHSBT collects blood donations.

Are there any risks for me in joining the study?

You may be asked to give blood more frequently than usual during the study. The main risk of giving blood more frequently than is now standard is iron deficiency and the related anaemia because of a low haemoglobin level. This is why NHSBT will continue to follow its routine safety procedures to monitor your haemoglobin level before donation.



It is important to stress that your safety will be looked after by NHSBT in the same way as before. That is, you will receive the usual 'finger-prick' screening test for haemoglobin levels and you will need to be within the safe range to be eligible to donate. If you fall outside this range you will be invited to return again at your allocated interval.

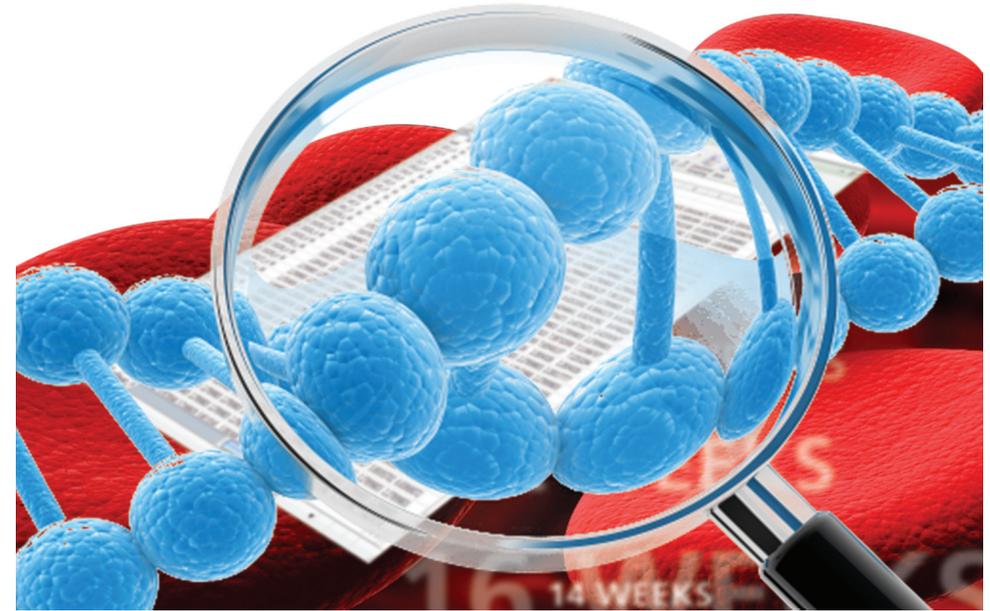
How will information about me be kept confidential?



We will protect your privacy at all times.

The steps taken to ensure confidentiality are detailed below.

- At the donation session, your consent to take part in the study will be recorded on a form that will contain identifiers including your name, email address and mobile phone number. These forms will be stored in a secure location and separately from the study data.
- Your samples and data will not include any personal identifying details; researchers working with your samples and data will, therefore, never know your identity. Your data will be stored using a unique, anonymous study identification number.
- A single table linking your anonymous study identification number to your NHSBT Donor Number and your NHS number identity will be stored on a separate password protected location which may be accessed by the study data manager only.
- The link table will be used to retrieve only relevant health information from your medical and other health-related records. The retrieved information will be anonymous as any personal identifying details will have been removed and replaced by the unique anonymous study identification number.
- All study data will be stored in a restricted-access, study database. This study database will not be connected to the NHSBT database containing your personal details. The study data will be linked to your study identification number, but your personal details (surname, first name, date of birth, address) will never appear in this database. Access to the study database will be password protected and will be used only by named researchers working on this study under the direct supervision of the senior scientific investigators.



What will be stored on the INTERVAL research database?

Your anonymised data will be stored in the INTERVAL study database and will be used by the study investigators to, for example, understand characteristics (e.g. age and gender) that influence the frequency with which people can donate safely. Stored anonymised data may also be used for future medical and health-related studies which have relevant scientific and ethics approval. Information that will be stored on the database will be anonymised and will include:

- Relevant information from your NHSBT donor record, e.g. gender, month and year of birth, details of your donation history and blood group.
- Data from the online questionnaires, forms and assessments (described above).
- Results from all laboratory measurements using your blood components. This will include your genetic information.
- Information on health outcomes collected from routine medical and other health-related records at the time of joining the study and from time to time thereafter.

How do I withdraw if I want to do so?

The study will be most valuable if few people withdraw from it, so it is important to discuss any concerns you may have with a member of the study team before you agree to participate. However, you can withdraw from the study at any time and without giving a reason but we hope that you will continue to give blood as a regular donor. You can withdraw by telephoning us on **freephone 0800 064 0089** Mon to Fri: 9:00 - 17:00 or by emailing helpdesk@intervalstudy.org.uk or by writing to the coordinating centre (see front of leaflet). This will allow us to discuss your concerns with you and determine the desired level of withdrawal from the following options.

"No further contact": This means that the INTERVAL team would no longer contact you directly, but would still have your permission to retain and use information and samples provided previously and to obtain and use further information from your health records.

"No further use": This means that, in addition to no longer contacting you or obtaining further information about you, any information and samples collected previously would no longer be available to researchers. Please note that we will not be able to remove results of any tests already performed with your samples from the study database but we will prevent your records from being used in any future research. We can also assure you that your blood samples will be removed from the central study repository after we have received your written notification. It will, however, not be possible to remove small volumes of your samples which already have been distributed to research laboratories but results which are generated after you have withdrawn will not be uploaded to the study database. Your signed consent and withdrawal forms will be kept as a record of your wishes.

If, having discussed the options and your concerns, you did decide to withdraw then we would send you a withdrawal form to confirm your wishes in writing. Examples of this form can be viewed on our website www.intervalstudy.org.uk. This form can be completed by you or, if you are not able to do so for some reason (such as illness), by someone able to act on your behalf. In the unlikely event of a loss of capacity to decide on continued participation in the study, the study team would retain blood samples and personal data collected and continue to use it confidentially in connection with the purposes for which consent has been granted.

Who will be able to use my information and samples?



Your anonymous information and samples will be available only to researchers who have relevant scientific and ethics approvals for their planned research. This could include researchers who are working in other countries and in commercial companies who are looking for new treatments or laboratory tests.

Insurance companies and employers will not be given any individual's information, samples or test results, and we will not allow access to the police, security services, relatives or lawyers, unless forced to do so by the courts.

There will be a requirement to publish the results of the research arising out of the samples and data collected during the study so that people can benefit from it.

The results will also be made available to participants and anyone else who might be interested at www.intervalstudy.org.uk.

Can I know the results obtained from my blood samples?

It is not planned to feedback any results from genetic tests. The only scenario where any other blood-based test results would be communicated back to you would be if we discover anything that has an immediate impact on your healthcare (e.g. in case cells are present in your blood that may point to leukaemia or a very high count of platelets). In this case, the researcher will inform a medical professional about the nature of the problem, and about who you are. The NHSBT medical professional would then use the routine procedures applicable in the NHS to get in touch with you and offer advice which may involve contacting your GP.

Who is organising and funding the study?


NHS
Blood and Transplant



The INTERVAL study has been set up by the Universities of Cambridge and Oxford in collaboration with NHSBT. Your involvement in the study will be for a period of two years; however, the study will extend beyond this as we intend to look at participants' health over many years to assist future studies about the health of blood donors.

Funding has been provided by NHSBT. If the 1-year initial phase of the study is concluded satisfactorily, then further funding is expected from NHSBT to complete the study. Once funding stops, data and samples collected during the study will be maintained, as a national collection, by the lead academic institution, the University of Cambridge, in partnership with NHSBT.

Who has approved the study?

All research in the NHS is reviewed by an independent group of people, called a Research Ethics Committee which is there to protect your safety, rights, wellbeing and dignity. This project has been reviewed and was given a favourable review by the Cambridge (East) Research Ethics Committee.

What will happen if an invention is made using my sample?

You are giving your sample as an absolute gift, i.e., without receiving a payment and without attaching conditions. The INTERVAL study is operating on a non-commercial basis, meaning it does not sell your sample to make a profit and will not allow anyone else who is working with the sample to do so either. However, if samples are made available to other research institutions or to private-sector research partners, a fee may be charged to cover the operational costs.

In the future, your sample may help researchers in the public and private sector to make an invention, e.g. develop a new product to diagnose, prevent or treat disease. If an invention results from the research undertaken with your sample you will not receive any compensation or payment. INTERVAL partners in the public sector may work together with commercial companies to develop inventions for the benefit of patient and donor care; and we hope that such products are brought into use by the NHS to improve health care in the future.

What happens if something goes wrong?

The risk of participants suffering harm as a result of taking part is minimal, and INTERVAL has insurance in place to provide compensation for any negligent harm caused by participation.

Who do I contact if I have any concerns?

If you have any concerns or complaints about anything to do with the INTERVAL study then you can telephone the freephone number on:



0800 064 0089 Mon to Fri: 9:00 - 17:00 or



email us at: helpdesk@intervalstudy.org.uk

Alternatively, if you would like to write to the person in charge, please send your letter to:



Professors John Danesh and David Roberts
The INTERVAL Study
University of Cambridge
Department of Public Health and Primary Care
Wort's Causeway, Cambridge CB1 8RN

We will reply to your letter promptly in writing, unless you enclose your telephone number and wish to discuss your concerns with us.