

Wellness Hub

Appendix 20. Instruction Sheets Dried Blood Spot Collection



This guide will demonstrate how to administer the dried blood spot (DBS) test.

Please read the entire guide carefully prior to beginning the test. An instructional video can be found at <https://www.statcan.gc.ca/eng/sc/video/ccahs>.

- You should **not** do the DBS test if you have a clotting condition such as hemophilia or Von Willebrand disease. In addition, you should not complete the DBS test if you have experienced fainting or vomiting due to a finger prick or the sight of blood.
- If at any point you feel that your health or safety is at risk due to this test, please stop the test immediately. It is recommended that you administer the test with someone nearby in case you begin to feel unwell.



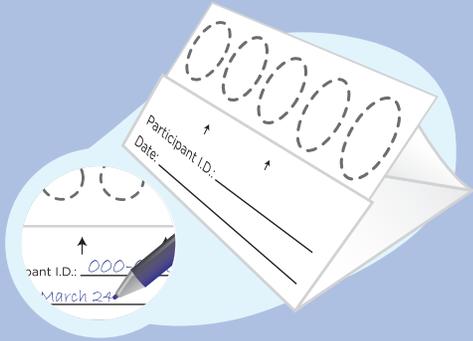
Before you begin, please make sure you have all the necessary items in your testing kit:

- 1 Dehumidifying pack
- 1 Dried blood spot (DBS) card
- 1 Humidity indicator card
- 1 Small brown envelope
- 1 Re-sealable plastic bag
- 2 Single-use purple lancets
- 2 Alcohol swabs
- 2 Gauze pads
- 2 Bandages
- 1 Plastic bag with a label to write your study number on
- 1 Prepaid postage envelope



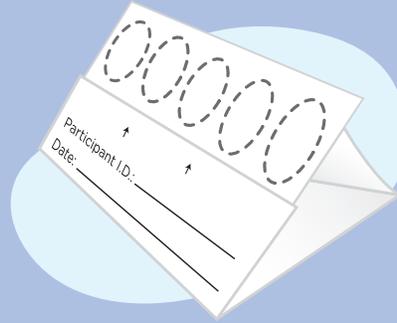
Step 1 | Getting ready

1. If possible, have another person present while you perform the DBS test. They will be able to assist you in the event that you feel faint. It is also useful to have an extra pair of hands the first time you do this test.
2. Write your **participant I.D.** and the date of collection on the DBS Card and the label on the front of the orange envelope.



3. Wash your hands with soap and water or use hand sanitizer.
4. Make sure you are seated comfortably at a clean table with all provided materials.

5. Fold back the flap of your DBS card to uncover the testing area with the 5 circles. **Make sure not to touch this area.** Your card should look like this:



6. Choose which finger you will be using to collect your sample. **Only use your middle or ring fingers.***



Step 2 | The collection

7. Open the gauze package and set aside. You will need this gauze later.
8. Hold the white base of the lancet with one hand, and twist off the cap. Even with the cap off, you will not see the needle. This is normal.



9. Use the alcohol swab to clean the entire tip of the chosen finger all the way down to the first knuckle, and allow it to air dry.



* If you have circulation problems in your non-dominant hand, please collect the sample from your other hand.

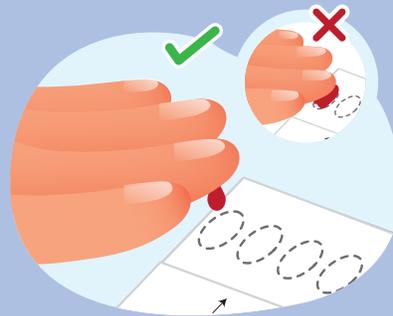
10. Position the lancet on your finger tip. The needle should go across the fingerprint lines, not in the same direction.



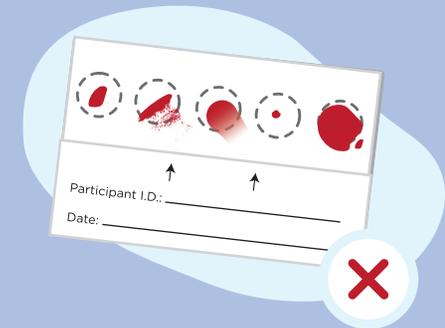
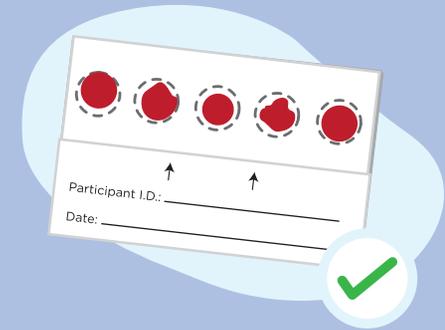
11. Lay the back of your hand against a solid surface and push the tip of the lancet firmly and quickly into your finger. You will hear a click and feel it prick your finger. Once a lancet is used, it retracts back into the device, and cannot be activated a second time. Two lancets have been provided in the event that you are unable to complete the test with only one finger prick. Should you choose to do a second finger prick, make sure to use a different finger.



12. Let a small drop of blood form at your finger tip and wipe it away with a gauze pad. Do not use the alcohol pad to wipe away the drop of blood.
13. Now it's time to start collecting blood on the card. Gently squeeze your finger from the base towards the tip to help a blood drop form. Once a large drop of blood forms on your fingertip, let the blood fall from your finger onto the card. The blood should saturate the card and show through the other side. Do not let your finger touch the card.



14. Fill the first circle completely before moving on to the next. The goal is to fill all 5 circles, but fewer full circles are better than more incomplete circles. If one drop of blood is not enough to fill a circle, aim the next drop of blood beside the first drop until the circle is filled. Avoid layering blood drops directly on top of one another. The picture below demonstrates a good dried blood spot sample compared to a poor quality sample.



However, antibody can be measured even from one or two spots, and from partial spots. If you have attempted the DBS test, you should mail back your DBS card no matter the outcome. Even if you were only able to fill one circle, or if none of your circles are complete, the laboratory will still try to analyze your sample.

Step 3 | After collection

15. Apply firm pressure with gauze until the bleeding has stopped.
16. Apply a bandage.
17. Place the DBS card in a safe place until it is completely dry. This will take about 3+ hours. Do not place it in direct sunlight or near a heater, and keep it out of reach of children and pets to avoid contamination.
18. Once dry, fold the flap back over the blood spots and place it in the small brown envelope. Write your participant ID and date on the label on the small brown envelope. Place the envelope, the humidity indicator card and the dehumidifying pack inside the plastic bag. Do not place the humidity indicator card in the brown envelope. Remove as much air from the bag as you can before closing it.



Step 4 | Mailing instruction

19. Place the plastic bag in the prepaid, pre-addressed envelope and seal it. Write your postal code in the six boxes in the bottom right hand corner of the return label. Do not write your name or address on the return label. Drop your completed envelope off at either 1) the designated area at your LTCH, or 2) the nearest mailbox.

