

Tips and Tricks for Finger- or Heel-sticks

A finger-stick or heel-stick blood draw (also known as *capillary blood sampling*) is a common procedure that is often classified as minimal risk. It allows researchers to get very small amounts of blood to perform a variety of useful tests.

Federal regulations allow the IRB to review research involving capillary blood sampling under expedited review if:

Collection is from healthy, non-pregnant adults who weigh at least 110 lbs. OR other
adults and children considering the age, weight, and health of the subjects, the collection
procedure, amount of blood, and frequency of blood draw (adopted from 45 CFR 46.110)

However, there are several ways to help reduce the risks and discomfort involved in finger- or heel-sticks. For example:

- Make sure the research team is fully trained in administering finger-sticks and/or heel-sticks. **Heel-sticks can pose special dangers for young children.** Detailed guidance for heel-sticks has been published here.
- Always wash your hands and wear gloves while doing procedures involving blood. Wear new gloves for each participant.
- Carefully wash the participant's skin with soap and water, followed by an alcohol swab.
- Ensure your lancets are sterile before puncturing the participant's skin. Make sure you use a new, sterile lancet for each puncture, even for multiple punctures on the same participant.
- Decide how many times un-successful attempts will be allowed (ideally two or fewer) and *strictly* adhere to that number, especially if your population includes children.
- If your population consists of children, try to develop a way to comfort the child after the procedure. Even warm words or a sticker will go a long way towards making the experience more positive for them.

The full protocol for capillary blood sampling recommended by the Center for Disease Control can be found at https://www.cdc.gov/nceh/lead/publications/1997/pdf/c2.pdf.

If your research involves finger- or heel-sticks, consider the following to help your IRB application submission move smoothly:

- Clearly and fully explain the procedures you will follow while performing finger- or heel-sticks.
- Include what measures will be taken to ensure the safety and comfort of the research participants.
- If your research involves pregnant women, neonates, or children, review the regulations and make sure your research adheres to them. Be particularly clear on how you will mitigate any risks present to these vulnerable populations.