



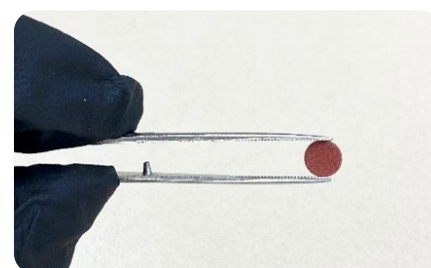
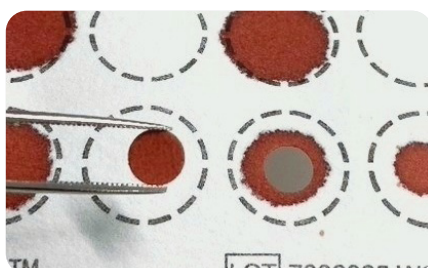
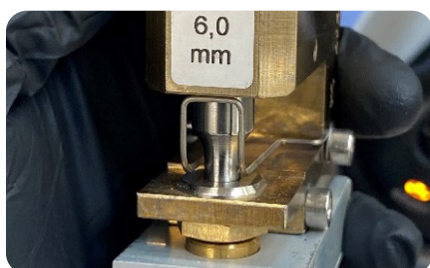
Blood Spot Reference Guide

Collection guidance for optimal blood spot testing.

ZRT Laboratory blood spot tests vary in the amount of sample required due to instrument consumption, dead volume, and concentration requirements. The goal of this guide is to ensure the best possible blood spot collection and collection experience, while ensuring enough blood is available to run all testing requested. It is better to collect more blood than needed, allowing for the highest quality spots to be selected or for confirmation testing if necessary.

What is a Blood Spot Punch?

A blood spot punch is a set diameter circle taken from patient blood spots dried on filter paper. Whatman 903 filter paper is highly regulated to absorb a set amount of blood. Each 6mm blood spot punch holds around 12.5µL of blood.

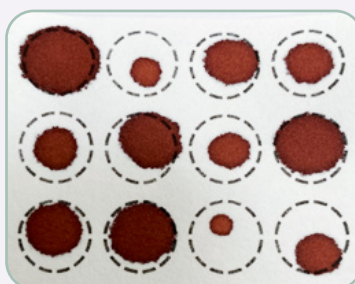


Blood Spot Punch Examples

Depending on the diameter of the blood spot, anywhere from zero to three punches can be taken per spot.

It is best to let a blood drop form on the finger to create a larger size diameter blood spot. Small spots will be rejected.

Unpunched
Blood Spot Card



Punched
Blood Spot Card



Laboratory Punch Requirements per Blood Spot Panel

Panel Name	Punches Required
B-220: Blood Spot Thyroids	2
B-221: Blood Spot Lipids	2
B-222: Blood Spot CardioMetabolic	6
B-223: Blood Spot LCMS Vitamin D	1
B-224: Blood Spot ICPMS Toxic & Essential Elements	2
B-240: Blood Spot LCMS Hormones 3 with SHBG	5
B-241: Blood Spot LCMS Hormones 5 with SHBG	5
B-242: Blood Spot LCMS Hormones 7 with SHBG	5
B-243: Blood Spot LCMS Hormones 7 with SHBG and Thyroid	5
B-201: Blood Spot SHBG	2
B-202: Blood Spot PSA	2
B-203: Blood Spot TSH	2
B-204: Blood Spot LH FSH	2
B-205: Blood Spot AMH	2
B-206: Blood Spot hsCRP	1
B-207: Blood Spot Insulin	2
B-208: Blood Spot HbA1c	1

Blood Spot Quality

Blood spot quality is important for producing the best possible test results. Small spots, poor saturation, double spotting, smearing and alcohol pad contamination should be avoided.

IDEAL	FRONT	BACK
 Good Quality Spots Uniform shape, size and saturation.		
AVOID	FRONT	BACK
 Small Spots Not large enough for testing.		
 Poor Saturation, Irregular Shapes, & Smearing Blood drop is swiped across card.		
 Double Spotting Blood is dropped on top of another blood spot.		
 Alcohol Pad Contamination Blood is collected before alcohol dries.		

Preventing Hormone and Element Contamination

It is essential to prevent blood spot contamination by adhering to collection instructions.

Topical hormones and creams or sprays containing elements like zinc can easily be transferred to blood spot collection cards if not handled properly. Proper preparation before, during and after blood spot collection is essential to prevent contamination issues that lead to inaccurate results, reporting delays, or sample rejection.

Tips to Prevent Sample Contamination

1	Lay out and prepare all collection material before collection begins.
2	Write your name , the date and time of collection on the card prior to washing hands.
3	Wash hands with soap and warm water and use a clean towel to dry.
4	Avoid touching surfaces that may contain hormone or element residue after washing hands.
5	Do not touch the filter paper other than to apply blood drops .
6	Make sure to use alcohol pad to clean finger, then let air dry. Do not touch anything with this finger until collection.
7	Wipe away the first drop of blood with supplied gauze.
8	Do not let blood run over/under the fingernail.
9	If unable to ship your collection with in 24 hours , place your collection card into a clean, unused zip lock baggie and place in a safe area of your freezer.

Still have questions? We're Here to Help.

If you have questions about blood spot collection, shipping, testing, or results, our team is here to help.

Call **1-866-600-1636** or email **info@zrtlab.com**.