

# Blood Lead Filter Paper Collection

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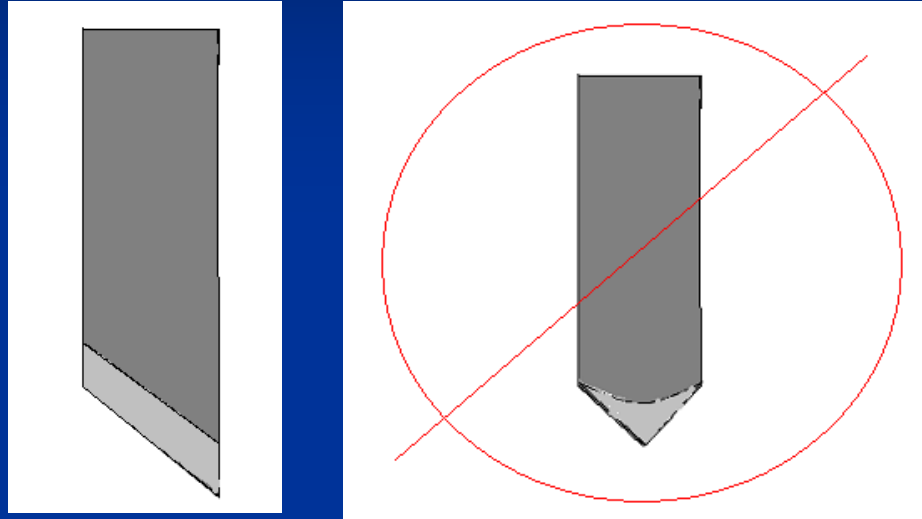
# Collection Procedure

## Overview

- Use capillary blood from heel or finger stick
- Fill in three circles (two circles minimum)
- Apply blood to only one side of the filter paper, make sure blood saturated thru paper.
- Dry Flat at least two to five minutes
- Transport via U.S. Mail in tyvek envelope.
- Transport via ground courier in biohazard bag.

# Collection Procedure

## Capillary Puncture



- Use a puncture device that delivers a lacerating puncture, which cuts across the capillary bed.
- Avoid devices designed for glucose or hemoglobin monitoring where only one drop of blood is needed.

# Collection Procedure

## Capillary Puncture

### BD Microtainer® Contact-Activated Purple Lancet

LOW FLOW – 30-Gauge (1.5 mm)

- ◆ Demonstrates significantly less pain for your patients than comparable products<sup>1</sup>

### BD Microtainer® Contact-Activated Pink Lancet

MEDIUM FLOW – 21-Gauge (1.8 mm)

### BD Microtainer® Contact-Activated Blue Lancet

HIGH FLOW – Blade (2.0 mm x 1.5 mm)

- ◆ Enables 500µL single puncture collection more consistently<sup>2</sup>



**WE RECCOMENED THE HIGH FLOW DEVICE**

# Collection Procedure

## Capillary Puncture

### Keys to Success

#### A well-prepped patient

- Optimize by proper site warming and cleansing. Warming the puncture site can increase blood flow by as much as seven fold. \*

#### Good blood flow

- Optimize by selecting the BD Microtainer® Contact-Activated Lancet that will provide the amount of blood necessary to perform the required tests.
- To obtain sufficient blood flow, hold the puncture site downward and gently apply intermittent pressure to the surrounding tissue. Strong repetitive pressure (milking) must be avoided; it may cause hemolysis or tissue-fluid contamination of the specimen. \*

\*NCCLS 2004 Doc. H4-A5 Vol. 24, No. 21



# Collection Procedure

## Capillary Puncture

### Instructions For Use

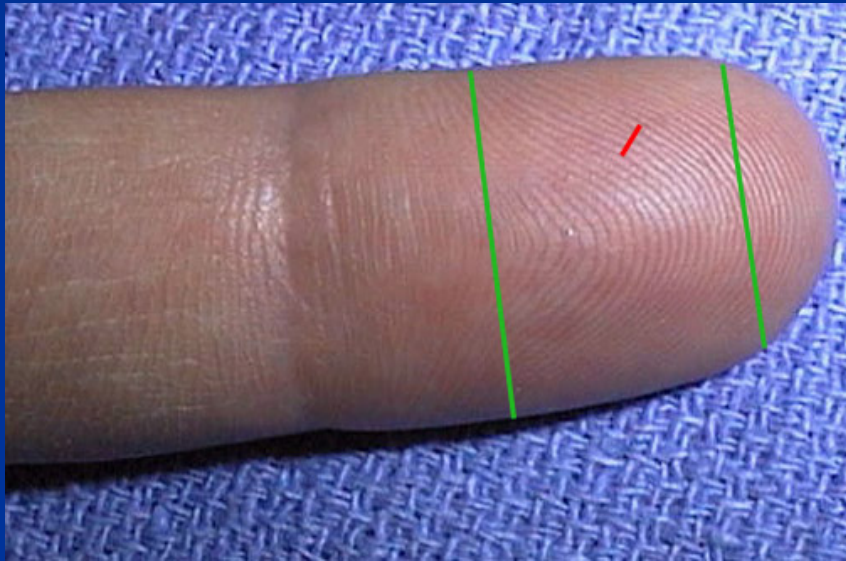
- 1 Identify the desired puncture site (shaded area) and make sure it is properly cleansed according to your facility's established procedures.





# Collection Procedure

## Capillary Puncture: Finger



- Warm finger for 3–5 minutes to increase blood flow
- Cleanse site with alcohol prep
- Air dry or wipe dry with sterile gauze pad
- See picture recommended puncture site

## Instructions For Use

- 1 Identify the desired puncture site (shaded area) and make sure it is properly cleansed according to your facility's established procedures.



- 2 Twist off tab to break the seal and discard.



- 3 Position safety lancet firmly against puncture site as illustrated. Hold safety lancet between fingers.



- 4 To activate, press safety lancet firmly against the puncture site. Do not remove the device from the site until an audible click is heard.



- 5 Discard used safety lancet into a sharps container.





# Collection Procedure

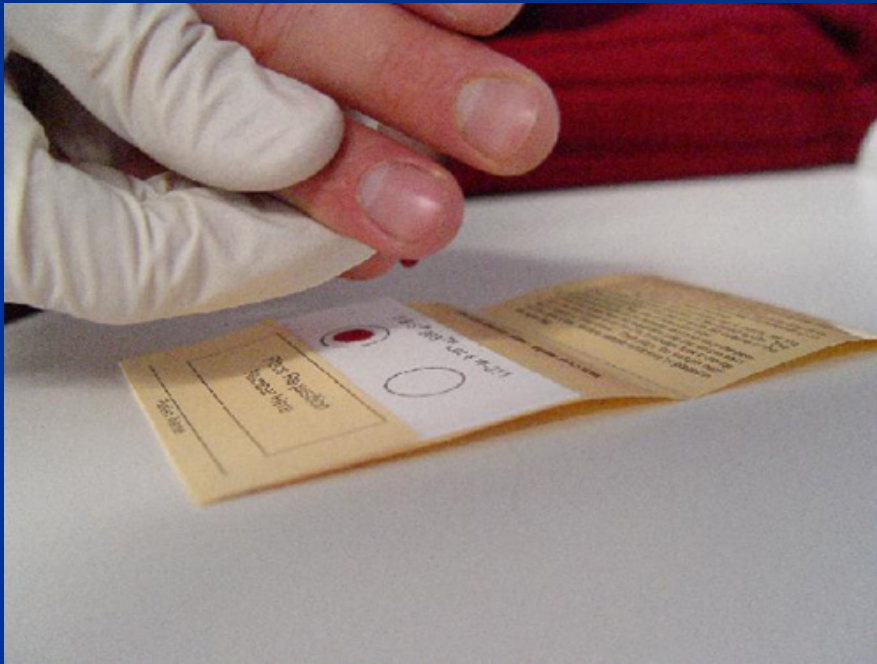
## Capillary Puncture: Finger

Wipe away the first drop of blood with a sterile gauze pad, as this drop may contain an excess of tissue fluids that could cause erroneous test results.

Gently apply intermittent pressure along finger capillaries up to the puncture site. Hold hand below elbow level to obtain the required blood volume. Strong repetitive pressure (milking) must be avoided; it may cause hemolysis or tissue-fluid contamination of the specimen.

# Collection Procedure

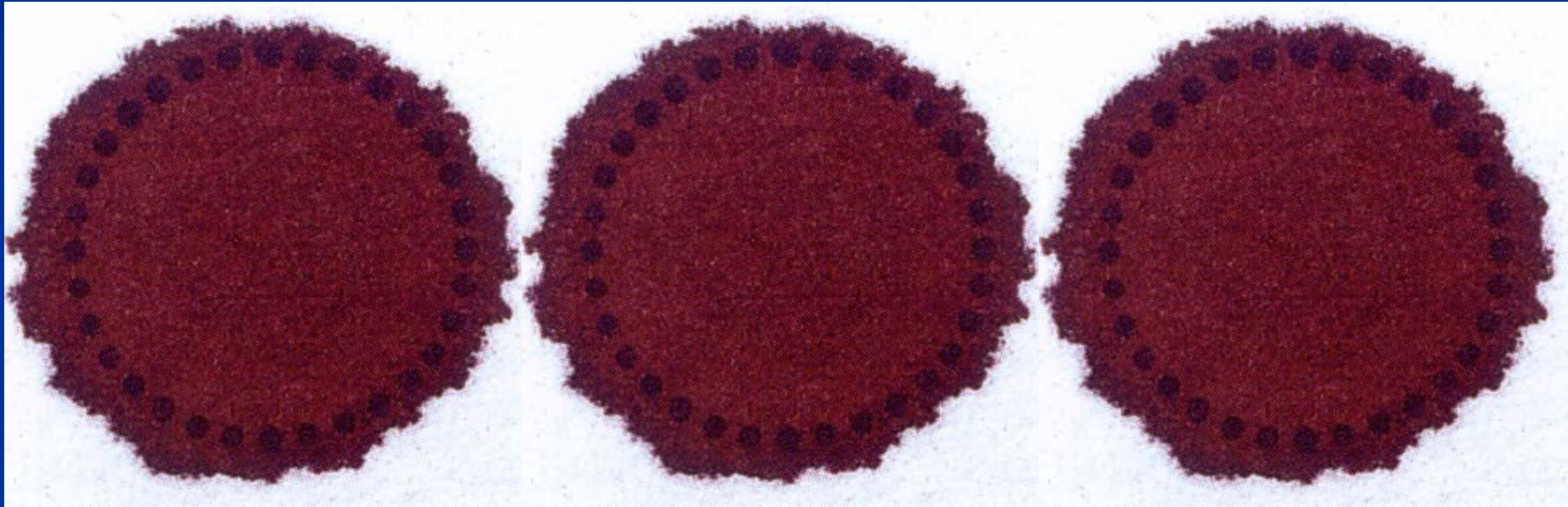
## Capillary Puncture: Finger



- Allow a blood drop to accumulate and fall onto one of the circles on the sample card. Collect a second and third blood drop in the same manner.
- The circles are provided as a guide for the approximate size and location of the blood spots.
- The sample is acceptable if the blood spots fall outside of the circles as long as they are of adequate size and soak through to the back side of the filter paper.

# Collection Procedure

## Satisfactory Blood Spot

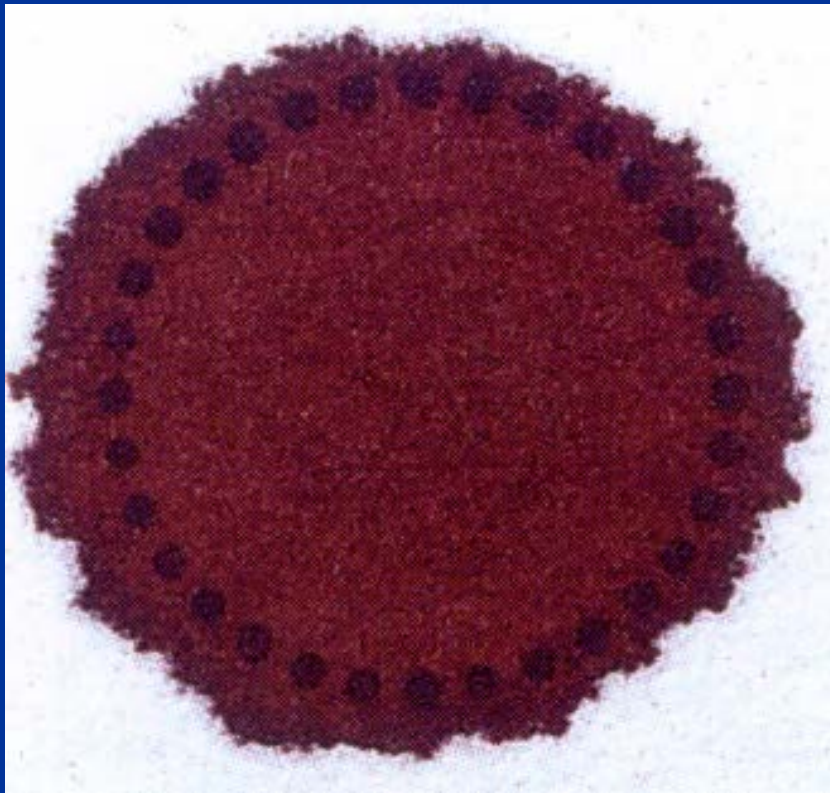


Three full circles (two full circles minimum)

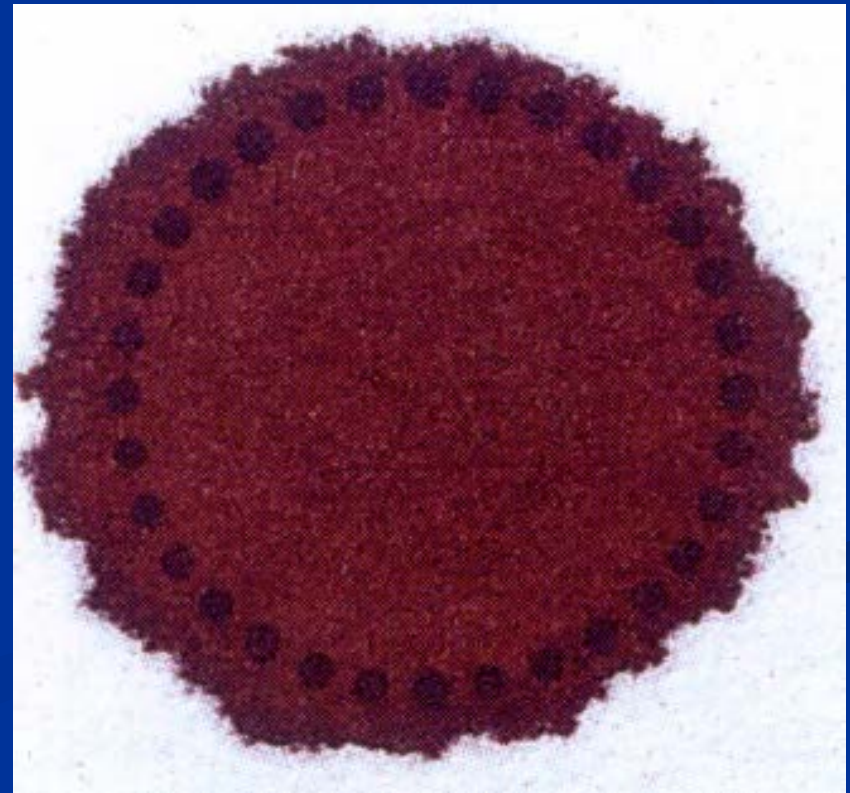
# Satisfactory Filter Paper Specimen

Allow blood to soak through to fill the circle.

Front of Card

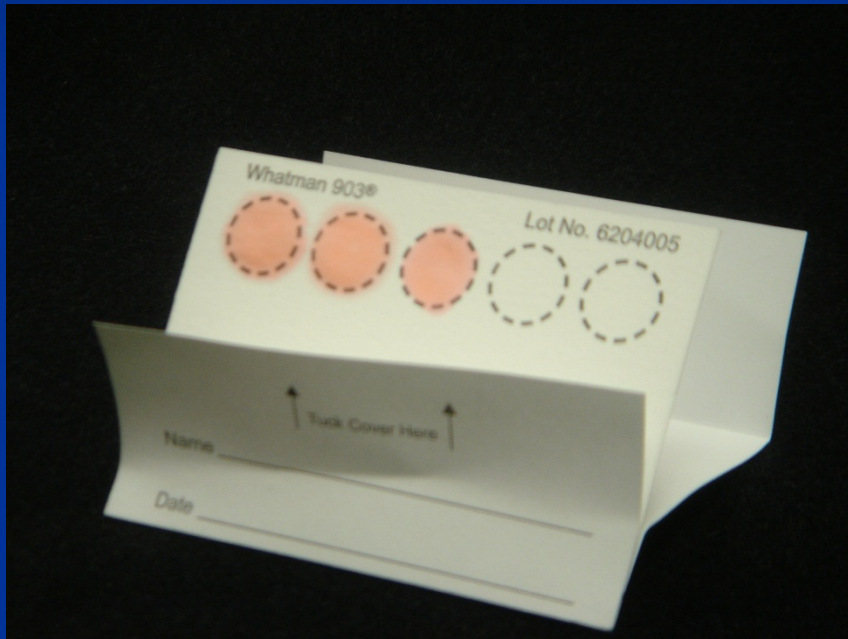


Back of Card





# Collection Procedure Blood Spot Card



OR



Three Spots, Two spots minimum

# Collection Procedure

## Specimen Processing

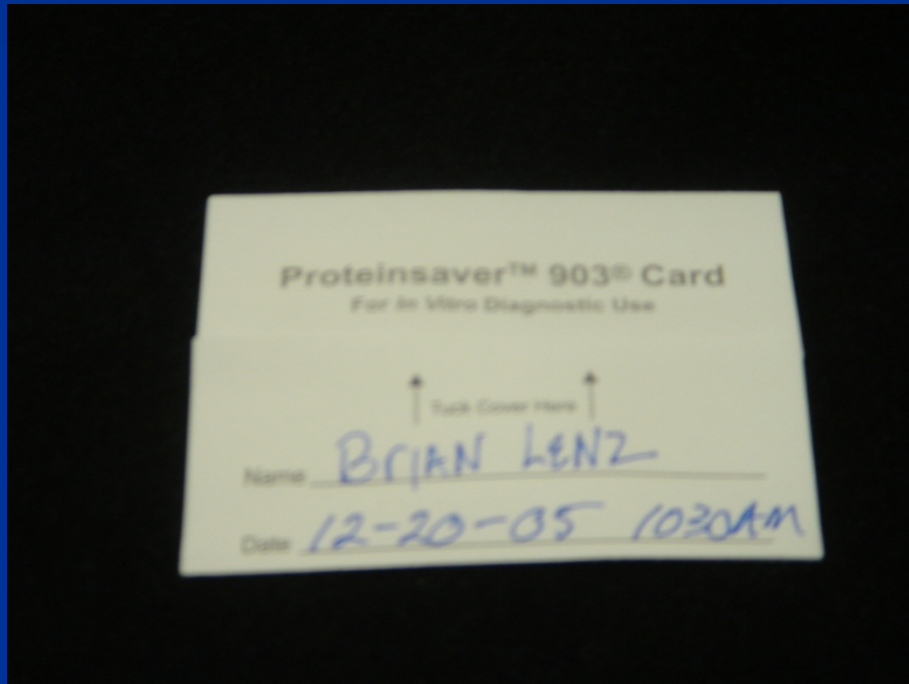


- Allow the blood spots to dry flat for 2 to 5 minutes and tuck in the top flap to create a “matchbook”.



# Collection Procedure

## Specimen Labeling



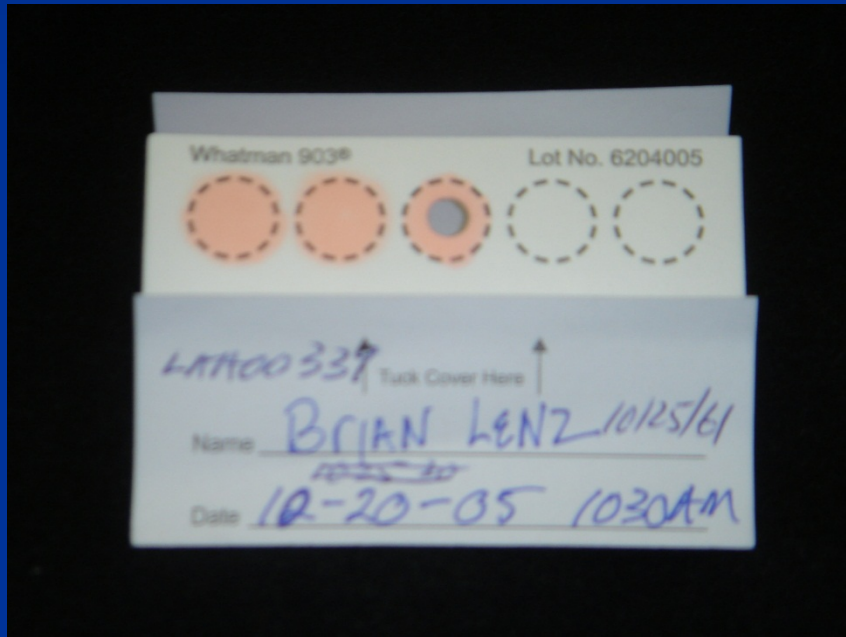
- Label the specimen completely with patients name, DOB, collection date and time, and collectors primary account number found on the blood lead screening requisition.
- Unlabeled specimens will be rejected.

# Collection Procedure

## Specimen Requisition

- “Must Have” patient information includes:
  - First and Last Name (no nicknames)
  - Date of Birth
  - Sex
  - Home Address, City, State, Zip
  - Date and Time Specimen Collected
  - Secondary Identifier, clinic number, DOB, ect., must be on sample and requisition.

# Satisfactory Filter Paper Specimen



- Example of blood spot punch that indicates why three spots are requested for testing.

# Collection Procedure

## “DO NOTS”

- DO NOT apply blood to both sides of the filter paper
- DO NOT apply “layers” of blood onto the same circle
- DO NOT apply excess amounts of blood (circles should not touch each other)
- DO NOT allow filter paper to come in contact with other substances

# Collection Procedure

## “DO NOTS”

- DO NOT Milk or squeeze the puncture site
- DO NOT touch area within circle before collection
- DO NOT touch the blood spots after collection on filter paper.
- DO NOT allow water, feeding formulas, antiseptic solutions, etc. to come into contact with the sample.
- DO NOT place filter paper in the envelope until thoroughly dry.