

# Prenatal and Pregnancy Loss Specimen Requirements

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## Amniotic Fluid

<b>15 ml</b>	Chromosome analysis
<b>15 - 20 ml</b>	Chromosome analysis and FISH
<b>25 - 30ml</b>	Chromosome analysis/FISH/chromosomal microarray (CMA)

- Collect in sterile, conical/clear plastic screw-top tubes and store at room temperature.
- Label container with patient's name and second identifier (e.g. DOB).

### *Sub-optimal samples:*

If volume is insufficient, gestational age <16 wks or >30 wks, or sample is compromised (e.g. blood-tinged), CMA testing will be performed on DNA extracted from cultured cells, thus extending turnaround time.

## Chorionic Villus Sampling (CVS)

<b>15 - 20 mg</b>	Chromosome analysis/FISH (includes STAT aneuploidy FISH)
<b>20 - 25 mg</b>	Chromosome analysis/FISH/chromosomal microarray (CMA)

- Collect in sterile plastic screw-top tube filled with sterile transport media at room temperature. Transport media is available (upon request).
- Label container with patient's name and second identifier (e.g. DOB).

### *Sub-optimal samples:*

If sample size is insufficient (<10 mg), CMA testing will be performed on DNA extracted from cultured cells, thus extending turnaround time. Turnaround time for chromosome analysis results may also be extended.

## Placenta and Fetal Tissue

*For all fetal tissue samples, the laboratory cannot accept intact fetuses > 10 weeks or large fetal parts.*

<b>1 cm<sup>3</sup></b>	Chromosome analysis with/without chromosomal microarray (CMA)
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Placenta (from site of cord insertion) and fetal tissue (gonad, kidney, lung, fascia lata)

For CMA, fetal tissue is preferred (gonad, kidney, lung, fascia lata; also umbilical cord < 16 weeks)

- Collect aseptically in sterile plastic screw-top tube/container filled with sterile transport media or sterile saline solution. Transport media is available (upon request).
- Label container with patient's name and second identifier (e.g. DOB).
- If both fetal and placental specimens are available, send in separate containers and label each container with specimen type.
- Store at room temperature; refrigerate if overnight.

## Paraffin Embedded Tissue

**8 – 10 "charged" Slides** FISH tissue aneuploidy screen

Unstained paraffin embedded tissue sections should be 4-5 micron in thickness

### **Percutaneous Umbilical Blood Sampling (PUBS)**

**1 – 3 ml** Chromosome analysis

**2 – 3 ml** Chromosome analysis and FISH

- Collect in 4 ml **sodium heparin** (green top) tube and store at room temperature.
- Label tube with patient's name and second identifier (e.g. DOB).

**2 ml** Chromosomal microarray (CMA)

- Collect in 4 ml **EDTA** (purple/lavender top) tube and store at room temperature.
- Label tube with patient's name and second identifier (e.g. DOB).

### **Maternal Cell Contamination (MCC) Testing**

Along with the CVS, amniotic fluid, products of conception (POC) or placenta specimen, a **maternal specimen is required:**

- **Maternal peripheral blood – 3 ml**

Collect in 4 ml EDTA (purple/lavender top) tube and store at room temperature.

Label tube with patient's name and second patient identifier (e.g. DOB).

OR

- **Maternal buccal/mouth swab** - Call lab to request designated collection kit. Collection instructions are included in each kit. Store sample at room temperature. Label tube with patient's name and second patient identifier (e.g. DOB).

*It is our laboratory's policy that we only accept DNA that has been isolated in a CLIA-certified laboratory or a laboratory meeting equivalent requirements as determined by the College of American Pathologists (CAP) and/or the Centers for Medicare and Medicaid Services (CMS)*  
*Should you have any questions, please call us at 303-724-5701*

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