



Frequently Asked Questions pertaining to storage of Potentially Infectious Reproductive Tissue

ReproTech provides storage services for patients who have tested reactive for any communicable disease, such as HIV, Hepatitis B, Hepatitis C, or Syphilis. ReproTech can help eliminate potential cross-contamination issues with this program. The extra steps detailed below help ensure the safe storage of reproductive tissue for all clients.

How are embryos, oocytes and sperm (reproductive tissue) stored?

Cryopreserved reproductive tissue is stored either in liquid nitrogen or nitrogen vapor.

What are the temperatures of liquid nitrogen or nitrogen vapor?

The temperature of liquid nitrogen is -196 degrees Celsius at sea level. Specimens stored in our vapor tanks are in canisters which sit above liquid nitrogen and are maintained at -194 degrees Celsius.

Is vapor storage safe?

Yes, as stated above, the temperature differential between liquid and vapor is minimal, approximately 2 degrees. The critical temperature for cryopreserved specimens is approximately -130 degrees Celsius, so specimens maintained at temperatures below -130 degrees Celsius would be safe. Studies show that vapor storage of vitrified samples is as effective as liquid storage.

Why are embryos and gametes from people who have a reactive test segregated?

There is a theoretical risk of cross contamination between specimens stored in liquid nitrogen. We say theoretical because there are no documented cases of disease transmission between cryopreserved human reproductive tissue. There is a documented case of Hepatitis transmission between blood bags stored in liquid nitrogen. That case is what prompted the concern, and resulting protocols, for segregating specimens from people who have tested reactive for various communicable diseases.

How are reproductive tissues from people who have a reactive test segregated?

ReproTech stores reproductive tissue from individuals who have had a reactive test to a communicable disease in vapor to eliminate the possibility of cross contamination from liquid nitrogen. Further segregation occurs by disease, meaning specimens from individuals who have tested reactive for "Disease A" are only stored in a canister with specimens from other individuals who have tested reactive for "Disease A." Likewise, specimens from individuals who have tested reactive for "Disease B" are stored in a separate canister with specimens from other individuals who have tested reactive for "Disease B."

What if I have a reactive test result for Hepatitis B Core Antibody but I am Antigen non-reactive? I do not want my specimens stored with those from people who have confirmed infectious status.

ReproTech provides another level of segregation in this instance. We further segregate the specimens of individuals who have antibodies to a disease, but have confirmatory testing indicating they are no longer infectious, from specimens of individuals who have confirmed infectious status.

If I have been confirmed to be non-infectious, why am I being stored as potentially infectious?

The FDA regulations for tissue donors require this type of designation. We simply are providing the safest storage possible. While you may have confirmatory testing indicating you are no longer infectious, this cannot be confirmed to a 100% certainty. Note that ReproTech charges an increased shipping fee, as well as an increased potentially infectious storage rate, to this group of patients. If non-reactive test results are not received by ReproTech before a shipment is scheduled, these potentially infectious storage rates will be charged.

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