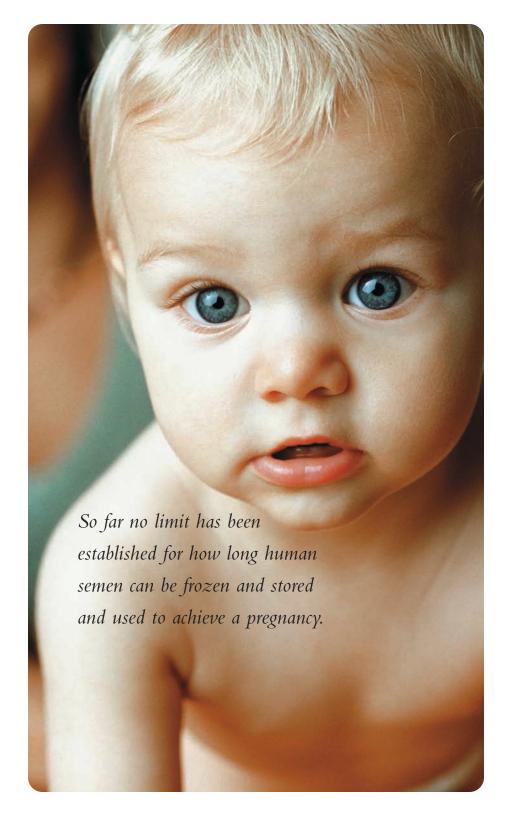


# Sperm Banking Keeping Hopes Alive



CRYOGENIC LABORATORIES INCORPORATED

www.cryolab.com





### Preserving your fertility



Cryopreservation is the process of freezing tissues or cells, and maintaining them at extremely low temperatures for future use. The technique has undergone important advances since the first births using frozen sperm occurred in the early 1950s. Samples are mixed with media that minimizes damage during freezing and thawing, placed in special vials and carefully frozen in liquid nitrogen vapor. They are then stored in liquid nitrogen in securely monitored tanks at a temperature of -196°C (-320°F).

Sperm cryopreservation has revolutionized the field of assisted reproduction. It has allowed men whose fertility may be jeopardized by situations ranging from on-the-job injuries to medications and illness to protect their potential to father children.

#### AFFORDABLE, PEACE OF MIND

The affordable costs and relative ease of semen cryopreservation presents obvious advantages. The pricing for Cryogenic Laboratories, Inc. (CLI) remains the most affordable of the nationally-known sperm banking facilities. Choosing to bank sperm to protect fertility can alleviate to some degree the concerns, and sometimes improve the overall attitude, of men facing medical procedures.

Cryopreservation has proven time and again to be a successful method of keeping your hopes alive of having a family.

"A documented patient of Cryogenic Laboratories stored his semen in 1972, age 22, anticipating an elective vasectomy. Using this sample he subsequently fathered three children at 16, 21 and 23 years from the time of his initial deposit."

Cryogenic Laboratories, Inc.





# Choose to bank sperm if...



Cryopreservation provides hope to men undergoing chemotherapy, radiation or radical surgery, who once had no hope of future fertility

Journal of Urology, 2003

The most common situations in which men seek a qualified resource for cryopreservation are before undergoing surgeries and treatments, or prior to taking medications which may affect their sperm quality and reproductive capabilities. Other situations include:

#### Experiencing an absent partner for the timing of reproductive procedures

To preserve the male partner's sperm for periods of absence, or to ensure the availability of semen at the critical time of a procedure such as IVF (in vitro fertilization) or other assisted reproduction procedures.

#### High-risk occupations

Certain high risk occupations involve the threat of reduced fertility, sterility or testicular injury:

- Exposure to environmental contaminants, chemicals, herbicides, pesticides, lead, radiation, pollutants and other everyday agents.
- Law enforcement, fire, safety and construction workers susceptible to accidents with consequential injuries.
- For the military, fertility insurance against exposure to chemical or biological agents, or if planning a pregnancy while on deployment.
- Athletes in high impact and contact sports.



# Choose to bank sperm if...

Testicular trauma resulting from an injury, from surgery or from an infection can trigger an immune response in the testes that damages sperm and impairs the ability of sperm cells to penetrate a female egg.<sup>(1)</sup>

#### Vasectomy insurance

While vasectomy reversal success rates are good, they do not always result in return of sperm to the semen or in sperm capable of fertilization. Cryopreservation prior to a vasectomy provides fertility insurance and eliminates the need for further surgery.

# Cases of testicular or prostate surgery; other malignant diseases

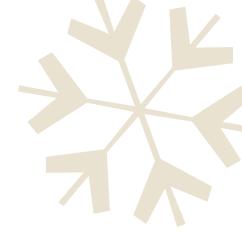
Impotence and/or sterility can be an unfortunate side effect of these types of surgeries and medications. Testicular cancer is the most common cancer in men between 15 - 40 years old.

Malignant diseases such as Hodgkin's disease, leukemia and others often occur in juveniles, young adults and men who haven't started or completed their families. Banking specimens prior to treatment increases the chances for a successful future pregnancy.

#### Oligozoospermia (low sperm count) or low quality sperm

Scientific data show sperm concentration is falling in men of industrial nations. (2) Various factors implicated include exposure to toxic substances such as PCBs, radioactive waste. pesticides and other harmful elementsknown and unknown. Other possible detriments to sperm concentration: stress, smoking, injuries, illness and drug use. Among partners trying to start a family, it has been found that infertility problems affect men and women equally. If you have any concerns, a semen analysis is another service performed by Cryogenic Laboratories, Inc.

To improve the chances of a pregnancy for men with low sperm counts multiple specimens can be pooled by the physician.







# Sperm storage for the cancer patient

### More focus on quality of life for survivors

Cancer patients survive at increasing rates, but successful treatment often leads to reduced fertility or sterility. The testes are highly susceptible to the toxic effects of radiation and chemotherapy at all stages of life. For the best possible outcome it's important that physicians consult with cancer patients about options for fertility preservation prior to treatment.

Oncologists have traditionally been focused on the most effective treatment in order to prolong life. But with the growing number of cancer survivors, much attention is being focused on their quality of life—the physical, social, psychological and spiritual issues they face. Surveys of cancer patients reveal a very strong desire to be informed of available options for future reproduction. (3)

Cryogenic Laboratories, Inc. has been a leader in the industry, protecting the reproductive future of cancer patients through careful application of cryopreservation techniques and the maintenance of semen in a frozen state over extended periods of time. Thanks to advances in fertility treatments, even the collection of substandard specimens has proven worthwhile. Although treatment may have begun, many patients are able to effectively store viable samples.

We appreciate the critical need of beginning your therapy and reserve appointments just for urgent care patients. Sperm quality tends to decline only a few days into starting cancer treatments. We suggest providing at least two specimens 48–72 hours apart to assure an adequate amount of samples for future inseminations. CLI can arrange for storage of semen in that critical window you have for banking.

Improvements in treating cancer have enabled many people to survive. However, treatment is often highly detrimental to the reproductive function. The only established method of fertility preservation in men is sperm cryopreservation.

American Society for Reproductive Medicine, March 2005





# The process collection and storage



The number of sperm that survive the freezing process varies greatly between individuals.

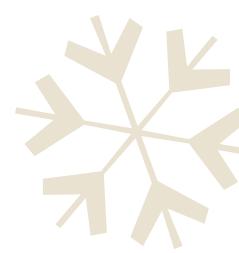
Therefore, the number of samples needed relates to the quality of the sample once it is thawed.

University of Utah Healthcare Services, 2005

#### On site, at our lab

In order to obtain a semen specimen of maximum quality and quantity for freezing, it is recommended that patients abstain from any ejaculation or emission for at least three days—but not more than five days—prior to an appointment on site at our laboratory facility. Semen depositors make an appointment during regular business hours, Monday through Friday. Our courteous, professional staff will walk you or a loved one through the necessary forms and provide facilities for your sample collection via self-masturbation

In any emergency situation regarding your diagnosis and treatment, please contact CLI to see how we can help. Customer care is our first consideration.





# The process collection and storage

#### PRIORITY MALE OVERNIGHT COLLECTION KIT

CLI has developed a unique collection and preservation kit to make it possible for men to transport their specimen to CLI from anywhere in the U.S. Each Priority Male kit comes complete with the necessary forms, detailed instructions and transport media. A solution is added to the specimen prior to shipment and serves to maintain its quality during transit. Overnight delivery assures that CLI receives and processes the semen specimen within 24 hours. Each kit also contains pre-paid FedEx return shipment packaging for your convenience. Using Priority Male eliminates any treatment delay for patients and makes it easy to coordinate with your therapy schedule.

Priority Male kits are obtained for a nominal fee by calling CLI at (800) 466-2796. They are shipped to semen depositors and may be billed to major credit cards. The depositor coordinates the return overnight shipment by attaching a pre-paid air-bill and calling CLI with a tracking number.\* A fast, convenient and worry-free process.

#### Pre- and post-freeze analysis

As standard procedure, a pre-freeze semen analysis is performed to document each sample's quality. This analysis will determine the count and motility (activity) of the sperm. CLI is one of the few cryobanks that routinely performs a post-thaw specimen analysis. We want to place into cryostorage only those specimens that demonstrate viable sperm cells. Based on this analysis our technicians will consult with you on future plans to optimize the samples required.

- Samples are protected from freeze damage with carefully calculated amounts of cryopreservation solution.
- Treated semen is divided into precise portions and sealed into vials.
- Vials are quickly frozen by vapor and stored in liquid nitrogen.
- A separate portion of the specimen is then thawed for complete post-thaw analysis.



<sup>\*</sup> Kits accepted Tuesday-Friday. Call for holiday schedule.



# The process collection and storage

#### Infectious disease screening

Clients who bank sperm for future use are required to have testing for infectious and sexually-transmitted diseases (STDs) such as HIV and hepatitis. Clients may elect to have these tests performed by CLI, or have blood drawn and tested by another laboratory or physician. Proof of results needs to be provided to CLI within 14 days of the time of first deposit.

Testing\* includes all of the following:

- HIV I & 2 (AIDS) Antibody
- HIV I NAT (Nucleic Acid Test)
- Hepatitis B Surface Antigen
- Hepatitis B Core Antibody
- Hepatitis C Viral Antibody
- HLTV I, II Antibody (an immunodeficiency disease)

In strict compliance with industry standards, separate biohazardous storage is maintained for specimens which have tested positive for STDs. This special storage incurs additional fees.

## Safety and security through constant monitoring

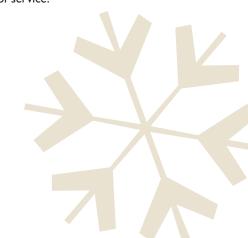
CLI guarantees effective storage and maintainance of patient samples until the patient decides to use them for assisted conception procedures or terminates the storage agreement. Storage tanks are inspected daily to replenish liquid nitrogen. While the entire system operates independently of electricity, the premises and tanks are constantly

monitored to assure proper storage conditions as well as overall building security. Staff is on call 24 hours each day.

Current fees with attractive discounts for long term, pre-paid storage can be found on the CLI website at www.cryolab.com.

## Withdrawal and shipping, at your service

Release forms allow for shipping of specimens at any time to the client's physician for use by his intimate partner. We recommend contacting CLI with at least two weeks notice to ensure all processes are in place for the shipping and protection of your vials. There is a nominal charge for release and shipping using specially designed transport canisters to preserve the specimen's frozen state for the receiving physician. Our policy requires payment at the time of service.



<sup>\*</sup>Testing subject to change without notice.



### More than a sperm bank

### BANK YOUR FUTURE WITH THE EXPERTS

Cryogenic Laboratories, Inc. (CLI) was established as the first private sperm bank in the country in the early 1970s. For over 30 years CLI has remained a leader in the industry through our unwavering commitment to excellence in medical science, advancements in cryobanking and genuine concern for the reproductive aspirations of our clients—present and future.

CLI has protected the reproductive future of patients through careful application of cryopreservation and the maintenance of semen in a frozen state over extended periods of time.

### CREDENTIALS YOU CAN COUNT ON

CLI is one of the few cryobanks in the country that is inspected and accredited by the prestigious American Association of Tissue Banks. We were also among the first in 2005 to meet tough, new FDA regulations. Having passed rigorous inspections of every aspect of our operations from semen acquisition and storage practices to quality control, quality assurance and record keeping, we are dedicated to the safety and protection of our patients' assets. Our certifications include:

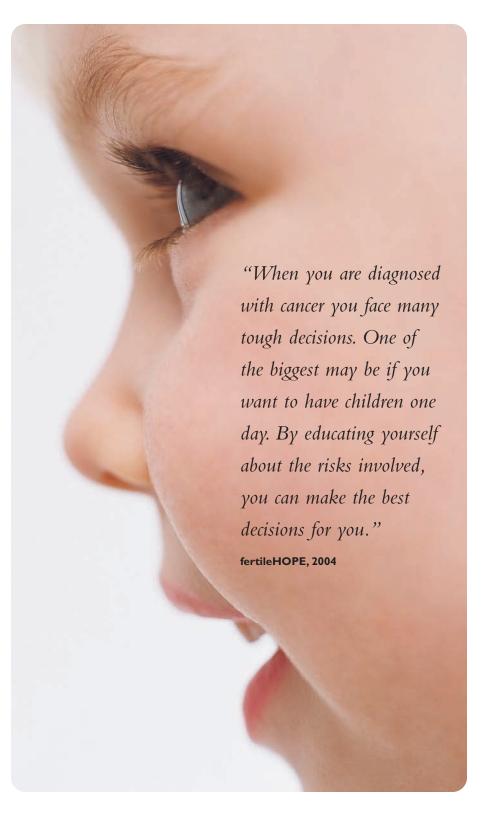
- An Inspected and Licensed Semen Bank, New York State Department of Health.
- Licensed as a tissue bank laboratory by the Maryland State Department of health.
- Licensed tissue bank by the California Department of Health.
- A federally inspected CLIA-certified laboratory.

Our staff of professional cryo-technicians trained in reproductive biology are highly experienced, processing thousands of specimens annually.

#### COMMITTED TO KEEPING HOPES ALIVE

CLI continues to make investments in researching, developing and refining the means to protect, freeze and store sperm for future insemination. We have helped to make the use of frozen sperm for assisted reproduction commonplace. We also work with our sister company to explore new methods for cryopreserving and storing embryos and ovarian tissue as well. At CLI, we are grateful for the opportunity to share our expertise in the field of human fertility. It is a rewarding experience to play a part in keeping your hopes alive.







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