

Fiscal impact reports (FIRs) are prepared by the Legislative Finance Committee (LFC) for standing finance committees of the NM Legislature. The LFC does not assume responsibility for the accuracy of these reports if they are used for other purposes.

Current FIRs (in HTML & Adobe PDF formats) are available on the NM Legislative Website (legis.state.nm.us). Adobe PDF versions include all attachments, whereas HTML versions may not. Previously issued FIRs and attachments may be obtained from the LFC in Suite 101 of the State Capitol Building North.

FISCAL IMPACT REPORT

SPONSOR Rodriguez DATE TYPED 2-21-05 HB _____

SHORT TITLE Umbilical Cord Blood Banking Act SB 605/aSFC

ANALYST Collard

APPROPRIATION

Appropriation Contained		Estimated Additional Impact		Recurring or Non-Rec	Fund Affected
FY05	FY06	FY05	FY06		
			Minimal		

(Parenthesis () Indicate Expenditure Decreases)

SOURCES OF INFORMATION

- LFC Files
- National Marrow Donor Program (www.marrow.org)
- Red Cross Cord Blood Donor Program (www.nrlc.org)
- New Jersey Right to Life (www.njrtl.org)
- Right to Life of Michigan (www.rtl.org)
- Cryobanks International (www.cryo-intl.com)

Responses Received From

- Department of Health (DOH)
- Human Services Department (HSD)
- Health Policy Commission (HPC)
- Legislative Council Services (LCS)

SUMMARY

Synopsis of SFC Amendment

The Senate Finance Committee Amendment to Senate Bill 605 deletes the \$25 thousand appropriation to DOH.

Synopsis of Original Bill

Senate Bill 605 appropriates \$25 thousand from the general fund to DOH for the purpose of enacting the Umbilical Cord Blood Banking Act. The act requires health care facilities providing health care services to pregnant women during the last trimester of pregnancy to educate pregnant women about potential benefits and options of umbilical cord blood donations, and permit

the women to arrange for umbilical cord blood donations. Additionally, the bill requires DOH to prepare and distribute publications to health care providers on the subject.

Significant Issues

DOH notes blood from umbilical cords (cord blood), rich in stem cells, can be transplanted into patients with diseases potentially treatable by this procedure. Cord blood transplants are still considered investigational. The American Academy of Pediatrics Work Group on Cord Blood Banking issued a review stating that umbilical cord blood contains a large number of hematopoietic [blood or bone marrow] stem cells; and stem cell transplantations have been performed increasingly with success for some diseases. The National Marrow Donor Program, in response to the question “Should I store the cord or donate it?” agrees with The American Academy of Pediatrics Work Group’s caution, “Given the difficulty of making an accurate estimate of the need for autologous [donation from self] transplantation and the ready availability of allogenic [donation from sibling or unrelated person] transplantation, private storage of cord blood as “biologic insurance” is unwise. Banking should be considered if there is a family member with a current or potential need to undergo a stem cell transplantation.”

While cord blood can be stored for personal use, it can also be donated, like blood, for an unknown match or for research. Cryobanks International describes how the cord blood gets to patients who need them: “Donated umbilical cord blood units that are received and processed by the Cryobanks International lab are listed on the Caitlyn-Raymond International Registry and The Bone Marrow Donors Worldwide Registry. Once listed on the registries, physicians and transplant coordinators all over the world will have access to the genetic information of the anonymous units. They will be able to search the registries to find matches for patients they have that are in need of stem cell transplants. Once a match has been found, the facility listing the unit will be notified and an expanded report on the unit will be provided. The transplant team will review the report, and if the unit is still being considered for transplantation, it is shipped directly to the transplant facility.”

HSD notes the act does not require providers to perform this service when such donations are contrary to a woman’s religious beliefs, nor if the provider sees a risk to the mother or child. However, the bill does not indicate that a provider is not obliged to perform the service if the provider perceives a public health risk from such a donation from a specific individual. However some believe the language beginning on page 4, line 3 referring to the “medically inadvisable” covers the issue of a public health risk.

FISCAL IMPLICATIONS

The appropriation of \$25 thousand contained in this bill is a recurring expense to the general fund. Any unexpended or unencumbered balance remaining at the end of FY06 shall revert to the general fund. However, it is not known if the entire appropriation, or just a portion, will be needed in future years.

ADMINISTRATIVE IMPLICATIONS

DOH indicates administrative tasks associated with this bill, such as contracting for services, can be completed with current staff.

OTHER SUBSTANTIVE ISSUES

HPC indicates expectant parents can make arrangements before the birth of their child to have their baby's cord blood collected immediately after birth (within 15 minutes of delivery). The cord blood can be stored by a commercial blood bank for their own use, or they can donate it to a public bank to be available for appropriately matched individual needing a transplant. Some health insurance companies are beginning to cover these costs. Although public banks pay for processing the cord blood sample, they require completion of a lengthy parental health/disease questionnaire, and arrangements with these banks must be made at least 90 days before the expected delivery date.

Additionally, expectant parents who have a family history of certain genetic diseases, such as severe anemias, immune disorders or some cancers, may want to consider the family benefit of storing cord blood.

Insurance companies and Medicaid still are hesitant to cover the cost of storage. Therefore, the service is most often available only to families who can afford it.

DOH research states most families have no risk factors for which umbilical cord blood banking is indicated; and most families have only about one in 20 thousand chance of needing stem cell transplantation. The cost of storing blood for private use begins at \$1,500 for collection of the blood and \$95 per year for storage. The blood is saved for up to 21 years, with a total cost approximately \$3,500. The National Marrow Donor Program states that good cord blood cell recovery has occurred after up to ten years of storage. Blood may be donated without cost, but donated cord blood is not reserved for the donor's family, rather for research or a non-family match. Universal guidelines for collection and storage of cord blood have not been established.

DOH indicates the goal of universal education about umbilical cord blood banking would be to provide a source to all families with potential need. Interest groups include those with family members who have diseases potentially treatable by cord blood transplantation. The political will to implement universal education of pregnant women about umbilical cord blood banking is uncertain. Providers would need substantial education and motivation to incorporate education about cord blood into routine prenatal care. The Legislative Council Service indicates compliance with this bill merely requires the department to develop brochures for health offices.

DOH cautions that legal issues could arise if the educational brochure did not adequately discuss risks and benefits, effectiveness, or future access to the blood. Additionally, the provisions of the will would need to be introduced into the Medical Practice Act.

HPC notes The March of Dimes reports that, like donated bone marrow, umbilical cord blood can be used to treat various genetic disorders that affect the blood and immune system, leukemia and certain cancers, and some inherited disorders of body chemistry. To date, more than 45 disorders can be treated with stem cells from umbilical cord blood.

Studies suggest that stem cells from cord blood offer some important advantages over those retrieved from bone marrow:

- Stem cells from cord blood are much easier to get because they are readily obtained from the placenta at the time of delivery.
- A broader range of recipients may benefit from cord blood stem cells. These can be stored

and transplanted back into the donor, to a family member or to an unrelated recipient.

- The use of cord blood may make blood stem cell transplants available more quickly for people who need them.
- Banked stem cells from cord blood can be more readily available, and this can be especially crucial for patients with severe cases of leukemia, anemia or immune deficiency who would, otherwise, die before a match can be found.
- Cord blood is less likely to contain certain infectious agents, like some viruses, that can pose a risk to transplant recipients.
- Some studies suggest that cord blood may have a greater ability to generate new blood cells than bone marrow.
- Cord blood stem cells offer some exciting possibilities for gene therapy for certain genetic diseases, especially those involving the immune system.

HPC cautions there are many ethical issues in connection with umbilical cord blood banking that have yet to be resolved. Families who want to donate their baby's cord blood to a public bank for use by others should be fully informed of their responsibilities and other implications of such donations. However, Right to Life of Michigan states, "Yet another promising alternative to embryonic stem cell research that doesn't have ethical implications is research on stem cells found in the blood of umbilical cords."

HPC indicates four states—Florida, Illinois, Texas and Maryland— currently have laws promoting cord-blood donations and another four states are considering similar legislation.

HPC quotes from the New England Journal of Medicine, November 2004: "Dr. Robert Steinbrook, reports that about 5000 to 6000 cord blood transplants have been performed worldwide. It was estimated that about 600 transplantations would take place in the US in 2004.

"Dr. Steinbrook also reports that there are about 20 private cord blood banks in the country, and their collection fees are about \$1,000-\$1,500, and about \$100 per year storage costs. Public banks do not charge for collection or storage, but do charge when a unit is provided for transplantation--about \$15,000 to \$20,000, although the fee is usually covered by health insurance."

ALTERNATIVES

DOH suggests a law requiring healthcare providers to identify families with potential need for stem cell transplantation and educate those families about umbilical cord blood banking, both private and donated.

KBC/lg:yr