F I S C A L I M P A C T R E P O R T

SPONSOR SJC **ORIGINAL DATE** 03/08/07 **LAST UPDATED** 03/13/07 **HB**

SHORT TITLE Public Peace, Health, Safety and Welfare **SB** CS/1232/aSFl

ANALYST Hanika Ortiz

ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY07	FY08	FY09	3 Year Total Cost	Recurring or Non-Rec	Fund Affected
Total		$.1 see narrative				

(Parenthesis ( ) Indicate Expenditure Decreases)

SOURCES OF INFORMATION
LFC Files

SUMMARY

Synopsis of SFl Amendment

The Senate Floor Amendment inserts "except as provided in 24-9A-1 (G)" to the definition of "clinical research" as used in the Maternal, Fetal and Infant Experimentation Act. Paragraph G defines "fetus" and the bill proposes changes to the term to exclude certain products of conception produced by in vitro fertilization clinics and targeted for disposal.

Synopsis of Original Bill

Senate Judiciary Committee Substitute for Senate Bill 1232 expands the scope of prohibited activities addressed in the current Maternal, Fetal and Infant Experimentation Act and enacts the "Biomedical Research Act", permitting biomedical research on certain embryonic stem cells while at the same time attempting to prohibit human reproductive cloning. Punishment for violation of the new covered activities is a misdemeanor.

Sections 1 and 2: cites the title of the Act as the "Biomedical Research Act" and purpose of the Act which states the benefits of human embryonic stem cell and other biomedical research.

Section 3: Defines terms used in the Act, including:

- "cell lines" is a permanently established cell culture that can proliferate indefinitely;
- "embryo" is an organism of the species Homo sapiens formed by fertilization;
- "human adult stem cell" is an undifferentiated cell found in differentiated tissue that can renew itself and differentiate to yield specialized cell types;
- "human reproductive cloning" is the asexual genetic replication of a human being by

transferring a pre-implantation embryo into a uterus or uterine-like environment with the purpose of creating a human fetus or human child;

- "pre-implantation embryo" is an embryo formed and maintained outside the human body by in vitro fertilization that has not experienced more than fourteen days of development, not including time in suspension, such as through freezing.
- "primitive streak" is the structure characterized by a furrow in the midline of the embryonic disc, and that generally develops around the fourteenth day of existence.

Section 4: Permits certain research and clinical applications involving the use of human embryonic stem cells from certain human genetic material targeted for disposal to be conducted in accordance with guidelines and policies promulgated by the United States Department of Health and Human Services, the National Research Council and the Institute of Medicine of the National Academies. The Act prohibits research involving an in vitro culture of an intact human embryo older than 14 days or until the formation of the primitive streak begins, whichever is first.

Section 5: Prohibits human reproductive cloning; attempted human reproductive cloning; purchasing, selling, transferring or obtaining human embryonic, gametic or cadaveric tissue for the purpose of reproductive cloning; and, creating an embryo with the sole intent of research.

Section 6: Exempts an employee from the conduct of research, experimentation or study if it conflicts with their sincerely held religious practices or beliefs.

Section 7: Provides that violation of the Act is a misdemeanor and shall be punishable by a fine of up to $25,000 or imprisonment for not more than 1 year or by both.

Section 8: Amends Section 24-9A-1 NMSA 1978, the Maternal, Fetal and Infant Experimentation Act; and, excludes from the definition of "fetus" products of conception produced by in vitro fertilization and targeted for disposal or deemed excess tissue.

FISCAL IMPLICATIONS

The bill creates guidelines for researchers studying human stem cells in New Mexico toward the goal of fostering such biomedical research within the State. This activity has the potential to require a general fund appropriation.

SIGNIFICANT ISSUES

The primitive streak is an important concept in bioethics, where some experts have argued that experimentation with human embryos is permissible only until the primitive streak develops, generally around the fourteenth day of existence. The development of the primitive streak is taken, by such bioethicists, to signify the creation of a unique, potential human being.

The bill also amends the Maternal, Fetal and Infant Experimentation Act and excludes "products of conception produced by in vitro fertilization technology and targeted for disposal or deemed excess tissue" from the definition of "fetus"; and, has the potential for serious ethical debate.

PERFORMANCE IMPLICATIONS

Current federal policy limits federally funded research to research conducted on embryonic stem cell lines created before August 2001. Federal funding of research involving cloning for the purpose of reproduction or research is prohibited.

The National Conference of State Legislatures website, in discussing state embryonic and fetal research laws posted the following:

> "State laws may restrict the use of embryonic stem cells from some or all sources or specifically permit certain activities. State laws on the issue vary widely. Approaches to stem cell research policy range from statutes in California, Connecticut, Maryland, Massachusetts and New Jersey and an Executive Order in Illinois which encourage embryonic stem cell research; to South Dakota's law, which strictly forbids research on embryos regardless of the source. States that specifically permit embryonic stem cell research have established guidelines for scientists such as *consent requirements and approval and review processes for projects*."

ADMINISTRATIVE IMPLICATIONS

The bill does not direct any New Mexico state agency for regulatory duties.

TECHNICAL ISSUES

Section 3; defines "embryo" without a limitation upon the age of the organism. An embryo is considered to be from conception up to 8 weeks of age. The definition of fetus currently in the Maternal, Fetal and Infant Experimentation Act does not distinguish between embryonic and fetal stages (greater than 8 weeks).

OTHER SUBSTANTIVE ISSUES

Human stem cells are believed to hold promise for the understanding and treatment of many major acute and chronic developmental and degenerative diseases. Because of their potential to divide and specialize into many different cells types, stem cells have great potential for use in repairing damaged tissues to recover lost function. The ability of stem cells to be re-directed toward the development of different cells varies depending upon the source of the stem cell, with adult cells appearing to have more limited potential than embryonic, placental and amniotic stem cells.

ALTERNATIVES

Initiate a "New Mexico Advisory Committee on Human Cloning" in an effort to provide useful advice to lawmakers by laying out the background on the issues, analyzing the arguments, and presenting recommendations. In addition, the State should create a more permanent body to provide advice and expertise on other important ethical, legal, and policy issues that will arise from our increased understanding of human biology.

AHO/nt