Pregnant Women, Fetuses, and Neonates

Purpose

This policy is to outline specific provisions that must be considered by the investigator, the Institutional Review Board (IRB), and Boston Children's Hospital when any research that involves pregnant women, fetuses, and neonates undergoes IRB review.

Policy

Boston Children's Hospital reviews all federally funded research that involves pregnant women or fetuses in accordance with federal regulations ((45 CFR 46 Part B) and all research in accordance with state regulations and Massachusetts Fetal Research statute, section 12J of MGL chapter 112 (FHS)).

Massachusetts law cites additional requirements above and beyond federal regulatory requirements that must be considered before any protocol that involves fetuses is approved and conducted.

For any research protocol that involves the use of fetuses, an expert in fetal medicine will be involved in the protocol review. This will either be a member of the Institutional Review Board with fetal expertise or a consultant.

For research involving pregnant women, fetuses, or neonates that is subject to Department of Defense regulation, additional protections apply. See IRB Policy: ***Research Involving Department of Defense Funding*.**

Procedures

Federal Regulation Definitions

Neonate: A newborn.

Viable: The capability, as it pertains to a neonate following delivery, of surviving (given the benefit of available medical therapy) to the point of independently maintaining heartbeat and respiration. If a neonate is viable, it may be included in research only to the extent permitted by, and in accordance with, the requirements of Subparts A and D of 45 CFR 46.

Nonviable neonate: A neonate that, although alive following delivery, is not viable.

Viable neonate: A child. Subparts A and D of the federal regulations apply (e.g., Additional Protections for Children).

Pregnant women or fetuses

To approve federally funded research that involves **pregnant women or fetuses**, the IRB must determine that the research meets the following conditions:

1. Where scientifically appropriate, the conduct of preclinical studies, including studies on pregnant animals and the conduct of clinical studies, including studies on non-pregnant women, provide data for assessing potential risks to pregnant women and fetuses.
2. The risk to the fetus is posed solely by interventions or procedures that hold out the prospect of direct benefit for the woman or the fetus; or, if there is no such prospect of benefit, the risk to the fetus is no greater than minimal and the purpose of the research is the acquisition of important biomedical knowledge that cannot be obtained by any other means;
3. Any risk that is posed represents the smallest risk possible in achieving the objectives of the research.
4. If the research holds out the prospect of direct benefit to the pregnant woman, the prospect of direct benefit both to the pregnant woman and the fetus, or no prospect of benefit to the woman or the fetus, when the risk to the fetus is no greater than minimal risk and the purpose of the research is the acquisition of important biomedical knowledge that cannot be obtained by any other means, the pregnant woman's consent is obtained in accordance with all informed consent provisions.
5. If the research holds out the prospect of direct benefit solely to the fetus, the consent of the pregnant woman and the father is required. However, the father's consent needs not be obtained if he is unable to consent because of unavailability, incompetence, or temporary incapacity, or the pregnancy is the result of rape or incest;
6. Each individual who provides consent is fully informed of the reasonably foreseeable impact of the research on the fetus or neonate.
7. For children who are pregnant, assent and permission are obtained in accordance with the provisions of the Special Protections for Children (45 CFR 46, Subpart D);
8. No inducements, monetary or otherwise, are offered to terminate a pregnancy.
9. Individuals engaged in the research play no role in deciding the timing, method, or procedures used to terminate a pregnancy; and
10. Individuals engaged in the research play no role in determining the viability of a neonate.

Neonates of Uncertain Viability

To approve research that involves **neonates of uncertain viability**, the following five conditions must be met:

1. Where appropriate, the conduct of preclinical and clinical studies provides data for assessing potential risks;
2. Each individual who provides consent is fully informed of the reasonably foreseeable impact of the research on the neonate;
3. Individuals engaged in the research play no role in determining the viability of a neonate;
4. The IRB determines that:

a. The research holds out the prospect of enhancing the probability of survival of the neonate to the point of viability, and any risk is the smallest possible for achieving this objective; **OR**

b. The purpose of the research is the acquisition of important biomedical knowledge that cannot be obtained by other means, and the research presents no added risk to the neonate; and

5. The legally effective informed consent of either parent or, if neither parent is able to consent because of unavailability, incompetence, or temporary incapacity, the legally effective informed consent of either parent's legally authorized representative, is obtained in accordance with the regulations that pertain to informed consent. However, the consent of the father or his legally authorized representative need not be obtained if the pregnancy is the result of rape or incest.

Nonviable Neonates

To approve research that involves **nonviable neonates**, the following eight conditions must be met:

1. Where appropriate, the conduct of preclinical and clinical studies provides data for assessing potential risks.
2. Each individual who provides consent is fully informed of the reasonably foreseeable impact of the research on the neonate.
3. Individuals engaged in the research play no role in determining the viability of a neonate.
4. The vital functions of the neonate are not artificially maintained.
5. The research does not terminate the heartbeat or respiration of the neonate.
6. The research presents no added risk to the neonate.
7. The purpose of the research is the acquisition of important biomedical knowledge that cannot be obtained by other means.
8. The legally effective informed consent of both parents is obtained in accordance with the regulations that pertain to informed consent; however, the waiver and alteration provisions do not apply. If neither parent is able to consent because of unavailability, incompetence, or temporary incapacity, the informed consent of one parent of a nonviable neonate is sufficient, except that the consent of the father need not be obtained if the pregnancy is the result of rape or incest. The consent of a legally authorized representative of either or both of the parents of a nonviable neonate is not sufficient to meet the informed consent requirements.

After Delivery, Placenta, Dead Fetus, or Fetal Material

To approve research that involves **after delivery, placenta, dead fetus, or fetal material**, the following two conditions must be met:

1. Research that involves, after delivery, the placenta; the dead fetus; macerated fetal material; or cells, tissues, or organs excised from a dead fetus, is conducted in accordance with any applicable federal, state, or local laws and regulations that govern such activities.

2. If information associated with material described in paragraph 1 of this section is recorded for research Purposes in a manner that enables the identification of living individuals, directly or through identifiers linked to the individuals, those individuals are considered research subjects and all pertinent subparts of this section are applicable.

Research Not Otherwise Approvable

In order to approve research not otherwise approvable, the following two conditions must be met:

1. The IRB finds that the research presents a reasonable opportunity to further the understanding, prevention, or alleviation of a serious problem that affects the health or welfare of pregnant women, fetuses, or neonates.
2. The Secretary of the Department of Health and Human Services, after consultation with a panel of experts in pertinent disciplines (e.g., science, medicine, ethics, law) and following opportunity for public review and comment, including a public meeting announcement in the *Federal Register*, determines that:
   a. The research presents a reasonable opportunity to further the understanding, prevention, or alleviation of a serious problem that affects the health or welfare of pregnant women, fetuses, or neonates;
   b. The research is conducted in accordance with sound ethical principles; and
   c. Informed consent is obtained in accordance with the informed consent provision of federal regulations subpart A and other applicable subparts of the regulations.

Massachusetts Fetal Research Statute, Section 12J of MGL Chapter 112 (FHS)

Massachusetts law prohibits research on fetuses and neonates subject to certain exceptions:

This section shall not prohibit procedures incident to the study of a human fetus while it is in its mother's womb or a neonate; provided that in the best medical judgment of the physician, made at the time of the study, the procedures do not substantially jeopardize the life or health of the fetus or neonate; and provided further that, in the case of a fetus, the fetus is not the subject of a planned abortion. In any criminal proceeding, a fetus shall be conclusively presumed not to be the subject of a planned abortion if the mother signed a written statement at the time of the study, that she was not planning an abortion.

This section shall not prohibit or regulate diagnostic or remedial procedures the purpose of which is: (i) to determine the life or health of the fetus or neonate involved; (ii) to preserve the life or health of the fetus or neonate involved or the mother involved; (iii) to improve the chances of a viable birth for a fetus with a congenital or other fetal conditions that would otherwise substantially impair or jeopardize the fetus's health or viability; or (iv) research approved by an institutional review board applying federal regulations for the protection of fetuses and neonates, that are conducted for the purpose of developing, comparing or improving diagnostic or therapeutic fetal or neonatal interventions to improve the viability or quality of life of fetuses, neonates and children.

For purposes of this section, "institutional review board" shall mean a board that has a minimum of 5 members who meet regularly to review research applying the standards of 45 CFR Part 46 or 21 CFR Parts 50 and 56, as may be amended from time to time.

Investigators should clarify in their IRB application, which exemption they think applies, based on careful review.

For example, if they think there is no substantial jeopardy to participating neonates (e.g. use of excess blood drawn for clinical purposes, or blood draws for research purposes safe and appropriate for the condition and age of the neonate), they should explicitly state this. If the research is not minimal risk, they should assume that a finding of no substantial jeopardy may be difficult and, reviewing carefully categories (i) through (iv) above, explain why one or more of those categories will apply.

- The IRB must make a case by case determination about whether 112 MGL 12J applies, taking into account the purposes of the research and the role of the investigational article.
- Investigators are welcome to discuss the issue and any questions with IRB staff in advance of submission.

Documentation and Other Requirements

IRB meeting minutes must address, on a protocol specific basis, how the protocol meets the above referenced federal and state regulatory criteria necessary for approval. The basis on which conclusions are drawn is to be apparent in the protocol, the minutes, and any correspondence with the investigator.

If necessary, specialists in obstetrics, neonatology, and fetal medicine are to be asked to participate as consultants to provide information to assist the IRB in determining whether specific above mentioned criteria have been or can be met.

The IRB must be able to ensure, through expert advice and monitoring capabilities, that the research is conducted in a location and in an environment that maximize protection of the mother and fetus.

Related Content

IRB Policy

Research Involving Department of Defense Funding.

Document Attributes

Title	**Pregnant women, Fetuses and Neonates**		
Author	Susan Kornetsky	**Dates Reviewed/ Revised**	5/17/2000 1/07/2008 4/20 /2010 5/1/2015 8/10/2015
Reviewed/ Revised by	Susan Kornetsky		
Copyright	©Boston Children's Hospital, 2020	**Last Modified**	1/31/2020

Approved	Susan Kornetsky, MPH Director of Clinical Research Compliance August Cervini, MBA Vice President for Research Administration