

RESEARCH INVOLVING PREGNANT WOMEN, FETUSES, OR NEONATES

1. Overview

Federal regulations require additional protections for pregnant women, fetuses, or neonates involved in research. These requirements include, among other things, that research involving greater than minimal risk is conducted only when benefits are anticipated for the mother and/or fetus, preclinical and clinical studies have been conducted (where scientifically appropriate) that provide data for assessing potential risks, and informed consent processes describe the reasonably foreseeable risks to the fetus or neonate.

The purpose of this policy is to describe the additional protections that must be provided to pregnant women, fetuses, and neonates involved in research and the requirements for informed consent when these populations are involved.

2. Definitions

Pregnancy: The period of time from implantation (of a fertilized egg within the uterus) until delivery of the fetus.

Delivery: The process of giving birth; complete separation of the fetus from the woman by any means.

Fetus: Unborn child; the product of conception from implantation until delivery.

Neonate: A newborn.

Viable Neonate: A neonate able to survive, given the benefit of available medical treatment, to the point of independently maintaining heartbeat and respiration as determined by a physician who is not engaged in the research.

Nonviable Neonate: A neonate that (although alive following delivery) is not capable of surviving to the point of sustaining life independently, even with the support of available medical treatment, as determined by a physician who is not engaged in the research.

3. General Information

A. To approve research involving pregnant women, fetuses, or neonates the IRBs must determine that the research provides the additional protections described in 45 CFR 46 Subpart B (see “Additional Protections” below) in addition to meeting the regulatory criteria for approval of research involving non-pregnant participants.

B. In general, risk to the fetus from research procedures (e.g., ultrasound, changes in maternal diet, etc.) must not be greater than minimal. When risk is considered to be

greater than minimal, the risk must be justified by anticipated benefit(s) for the mother and/or fetus.

- C. “Viable” neonates may be included in research that provides the additional protections for children involved as subjects in research described by federal regulations and OSU HRPP policy [[Research Involving Children](#)].
- D. Research involving any of the following (after delivery) is not permissible under Ohio law if resulting from the purposeful termination of a pregnancy:
 - Placenta
 - Dead fetus
 - Macerated fetal material
 - Cells, tissue, or organs excised from a dead fetus.
- E. Research on transplantation of fetal tissue for therapeutic purposes may be performed as consistent with Ohio law (described above) and [Public Law 103-43](#). For more information about Ohio law related to such research, contact the OSU Office of Legal Affairs.

4. Additional Protections for Pregnant Women and Fetuses

Pregnant women or fetuses may be involved in research only if all of the following conditions are met:

1. *Where scientifically appropriate* (e.g., research involving investigational drugs or medical devices), preclinical studies (including studies on pregnant animals) and clinical studies (including studies on non-pregnant women) have been conducted and provide data for assessing potential risks to pregnant women and fetuses
2. Regarding the risk(s) of the research, any risk is the least possible for achieving the objectives of the research, and:
 - The risk to the fetus is caused solely by interventions or procedures that offer the prospect of direct benefit for the woman or the fetus, or
 - If there is no expectation of benefit(s), the risk to the fetus is not greater than minimal and the purpose of the research is the development of important knowledge that cannot be obtained by any other means.
3. Consent of the pregnant woman is obtained and documented as described by OSU HRPP policies [[Informed Consent Process and the Elements of Informed Consent](#)] and [[Documentation of the Informed Consent Process](#)] in any of the following circumstances:
 - The research offers the prospect of direct benefit to the pregnant woman
 - The research offers the prospect of direct benefit to both the pregnant woman and the fetus

- The research does not offer the prospect of benefit for either the woman or the fetus, but the risk to the fetus is not greater than minimal and the purpose of the research is the development of important knowledge that cannot be obtained by any other means.
4. The consent of *both* parents must be obtained and documented as described by OSU HRPP policies [[Informed Consent Process and the Elements of Informed Consent](#)] and [[Documentation of the Informed Consent Process](#)] for research that holds out the prospect of direct benefit solely to the fetus, with the following exceptions:
 - The father's consent need not be obtained if he is unable to consent because of unavailability, incompetence, or temporary incapacity
 - The father's consent need not be obtained if the pregnancy resulted from rape or incest.
 5. Each individual providing consent is fully informed regarding the reasonably foreseeable influence of the research on the fetus or neonate
 6. No inducements (monetary or otherwise) will be offered to terminate a pregnancy
 7. Individuals engaged in the research will have no part in any decisions as to the timing, method, or procedures used to terminate a pregnancy
 8. Individuals engaged in the research will have no part in determining the viability of a neonate.

5. Additional Protections for Certain Neonates

Nonviable neonates and neonates of uncertain viability may be involved in research as described below.

- A. Nonviable neonates may be involved in research only if all of the following conditions are met:
 1. *Where scientifically appropriate*, preclinical and clinical studies have been conducted and provide data for assessing potential risks to neonates
 2. Vital functions of the neonate will not be artificially maintained
 3. The research will not terminate the heartbeat or respiration of the neonate
 4. There will be no added risk to the neonate resulting from the research
 5. The purpose of the research is the development of important knowledge that cannot be obtained by other means
 6. The consent of *both* parents must be obtained and documented as described by OSU HRPP policies [[Informed Consent Process and the Elements of Informed Consent](#)] and [[Documentation of the Informed Consent Process](#)], with the following exceptions:
 - If either parent is unable to consent because of unavailability, incompetence, or temporary incapacity, the informed consent of one parent is sufficient

- The father's consent need not be obtained if the pregnancy resulted from rape or incest
 - The consent of a legally authorized representative (for either or both of the parents of a nonviable neonate) is not sufficient
 - Provisions for waiver or alteration of the consent process are not applicable.
7. Each individual providing consent is fully informed regarding the reasonably foreseeable influence of the research on the neonate
 8. Individuals engaged in the research will have no part in determining the viability of the neonate.
- B. Neonates of uncertain viability may be involved in research (until a physician has determined whether or not the neonate is viable) only if all of the following conditions are met:
1. *Where scientifically appropriate*, preclinical and clinical studies have been conducted and provide data for assessing potential risks to neonates
 2. Regarding the risk(s) of the research:
 - The research offers the prospect of enhancing the probability of survival of the neonate to the point of viability, and any risk is the least possible for achieving that objective; or
 - If the research does not offer the prospect of enhancing the probability of survival, the purpose of the research is the development of important knowledge that cannot be obtained by other means, and there will be no added risk to the neonate resulting from the research.
 3. The consent of *either* parent is obtained and documented as described by OSU HRPP policies [[Informed Consent Process and the Elements of Informed Consent](#)] and [[Documentation of the Informed Consent Process](#)], with the following exceptions:
 - If neither parent is able to consent because of unavailability, incompetence, or temporary incapacity, the informed consent of either parent's legally authorized representative is obtained
 - The consent of the father or his legally authorized representative need not be obtained if the pregnancy resulted from rape or incest.
 4. Each individual providing consent is fully informed regarding the reasonably foreseeable influence of the research on the neonate
 5. Individuals engaged in the research will have no part in determining the viability of the neonate.

6. Research Subject to DHHS Regulations

For research involving pregnant women, fetuses, or neonates that is subject to DHHS regulations additional requirements apply, as described below.

- A. Pregnant women and/or fetuses may be involved in greater than minimal research without the prospect of benefit for the woman or the fetus if the applicable conditions described above (see “Additional Protections for Pregnant Women and Fetuses”) are met, with the following additional requirement:
- The purpose of the research is the development of important *biomedical* knowledge that cannot be obtained by any other means.
- B. Nonviable neonates may be involved in research if the applicable conditions described above (see “Additional Protections for Certain Neonates”) are met, with the following additional requirement:
- The purpose of the research is the development of important *biomedical* knowledge that cannot be obtained by any other means.
- C. Neonates of uncertain viability may be involved in research that does not offer the prospect of enhancing the probability of the neonate’s survival (to the point of viability) when there is no added risk to the neonate resulting from the research if the applicable conditions described above (see “Additional Protections for Certain Neonates”) are met, with the following additional requirement:
- The purpose of the research is the development of important *biomedical* knowledge that cannot be obtained by any other means.
- D. Research involving pregnant women, fetuses, or neonates that does not meet the conditions for approval described by federal regulations and OSU HRPP policy may be conducted only if all of the following conditions are met:
- The IRB finds that the research presents a reasonable opportunity to further the understanding, prevention, or alleviation of a serious problem affecting the health or welfare of pregnant women, fetuses, or neonates
 - The Secretary (DHHS), after consultation with a panel of experts in pertinent disciplines (e.g., science, medicine, ethics, law, etc.) and following opportunity for public review and comment (including a public meeting announced in the *Federal Register*), has determined that either:
 - The research satisfies the regulatory conditions for approval, or
 - The research presents a reasonable opportunity to further the understanding, prevention, or alleviation of a serious problem affecting the health or welfare of pregnant women, fetuses, or neonates; the research will be conducted consistent with sound ethical principles; and informed consent will be obtained in accordance with the regulatory requirements pertaining to pregnant women, fetuses, or neonates.

7. Research Involving Women Who May Become Pregnant

For research in which pregnancy is incidental to participant selection, the additional protections described by federal regulations and OSU HRPP policy do not specifically apply. However, investigators and IRBs should consider additional protections when a man or woman's participation could pose any risk to a potential fetus. In some research, participants should be advised to avoid pregnancy during or following the study and to notify the investigator immediately if pregnancy occurs. Exclusion of all women who could become pregnant may be justified in research involving potential serious risk(s) to the fetus. For an assessment of the effects of proposed research on fetuses, research involving pregnant women and women who may become pregnant should be reviewed by the Maternal-Fetal Welfare Committee, as described below.

8. OSU Maternal-Fetal Welfare Committee

- A. The OSU Maternal-Fetal Welfare (MFW) Committee reviews research to assess risks that are unique to pregnant women and/or fetuses (e.g., from medications or physical tasks) and advises investigators and the IRBs about effects that the pregnant state might have on study outcomes or interventions. *Note: MFW Committee approval does not constitute IRB approval.*
- B. MFW Committee approval is required in addition to IRB approval for research involving pregnant women and fetuses in either of the following circumstances:
 - The research involves greater than minimal risk or unknown but potentially serious risk(s) to the pregnant woman or fetus (e.g., phase I drug studies)
 - There are questions regarding the acceptability of including pregnant women in the research because of scientific concerns about study outcomes or interventions (e.g., antihypertensive drug studies).
- C. MFW Committee approval is also required for research that involves women who may become pregnant (when the research does not specifically exclude pregnant women) in either of the following circumstances:
 - The research involves greater than minimal risk or unknown but potentially serious risk(s) to the fetus
 - The pregnant state (when not excluded) could have unintended effects on study outcomes or interventions.
- D. Minimal risk research and studies in which the pregnant state does not present concerns about data validity do not require MFW Committee approval.
- E. Research submitted for IRB review is screened by ORRP staff to determine if MFW Committee review is required. The principal investigator will be notified when a submission is sent to the MFW Committee for review. Notification of the outcome of MFW Committee review is sent to the PI and ORRP for inclusion with the materials for

IRB review. The IRBs may also independently request a review by the MFW Committee when questions arise during the review process.

- F. For more information about Maternal-Fetal Welfare Committee review, see [Maternal-Fetal Welfare Committee](#).

9. Documentation

Protocol-specific findings related to the additional protections required for research involving pregnant women, fetuses, or neonates will be documented in the IRB meeting minutes (or IRB records for expedited review).

10. Applicable Regulations/Guidance

45 CFR 46.204; 45 CFR 46.205; 45 CFR 46.206; 45 CFR 46.207; 45 CFR 46.402; "Research on Transplantation of Fetal Tissue," Public Law 103-43, Section 498A (06/10/93)