

CODE OF FEDERAL REGULATIONS

TITLE 45

PUBLIC WELFARE

DEPARTMENT OF HEALTH AND HUMAN SERVICES

PART 46--PROTECTION OF HUMAN SUBJECTS

(45 CFR 46)

Revised June 18, 1991 (Effective August 19, 1991)

Edition October 1, 1994

Subpart A --Federal Policy for the Protection of Human Subjects (Basic DHHS Policy for Protection of Human Research Subjects)

Sections:

46.101 To what does this policy apply?

46.102 Definitions.

46.103 Assuring compliance with this policy--research conducted or supported by any Federal Department or Agency.

46.104-46.106 [Reserved]

46.107 IRB membership.

46.108 IRB functions and operations.

46.109 IRB review of research.

46.110 Expedited review procedures for certain kinds of research involving no more than minimal risk, and for minor changes in approved research.

46.111 Criteria for IRB approval of research.

46.112 Review by institution.

46.113 Suspension or termination of IRB approval of research.

46.114 Cooperative research.

46.115 IRB records.

46.116 General requirements for informed consent.

46.117 Documentation of informed consent.

46.118 Applications and proposals lacking definite plans for involvement of

human subjects.

46.119 Research undertaken without the intention of involving human subjects.

46.120 Evaluation and disposition of applications and proposals for research to be conducted or supported by a Federal Department or Agency.

46.121 [Reserved]

46.122 Use of Federal funds.

46.123 Early termination of research support: Evaluation of applications and proposals.

46.124 Conditions.

Subpart B --Additional DHHS Protections Pertaining to Research, Development, and Related Activities Involving Fetuses, Pregnant Women, and Human and Human in vitro Fertilization

Sections:

46.201 Applicability.

46.202 Purpose.

46.203 Definitions.

46.204 Ethical Advisory Boards.

46.205 Additional duties of the Institutional Review Boards in connection with activities involving fetuses, pregnant women, or human in vitro fertilization.

46.206 General limitations.

46.207 Activities directed toward pregnant women as subjects.

46.208 Activities directed toward fetuses in utero as subjects.

46.209 Activities directed toward fetuses ex utero, including nonviable fetuses, as subjects.

46.210 Activities involving the dead fetus, fetal material, or the placenta.

46.211 Modification or waiver of specific requirements.

Subpart C --Additional DHHS Protections Pertaining to Biomedical and Behavioral Research Involving Prisoners as Subjects

Sections:

46.301 Applicability.

46.302 Purpose.

46.303 Definitions.

46.304 Composition of Institutional Review Boards where prisoners are involved.

46.305 Additional duties of the Institutional Review Boards where prisoners are involved.

46.306 Permitted research involving prisoners.

Subpart D --Additional Protections for Children Involved as Subjects in Research

Sections:

46.401 To what do these regulations apply?

46.402 Definitions.

46.403 IRB duties.

46.404 Research not involving greater than minimal risk.

46.405 Research involving greater than minimal risk, but presenting the prospect of direct benefit to the individual subjects.

46.406 Research involving greater than minimal risk and no prospect of direct benefit to individual subjects, but likely to yield generalizable knowledge about the subject's disorder or condition.

46.407 Research not otherwise approvable, which presents an opportunity to understand, prevent, or alleviate a serious problem affecting the health or welfare of children.

46.408 Requirements for permission by parents or guardians and for assent by children.

46.409 Wards.

ADDENDUM:

46 FR 8392 RESEARCH ACTIVITIES WHICH MAY BE REVIEWED THROUGH EXPEDITED REVIEW PROCEDURES

[AUTHORITY: 5 U.S.C. 301; Section 474(a) 88 Stat. 352 (42 U.S.C. 2891-3(a))]

[EDITORIAL Note: The Department of Health and Human Services issued a notice of waiver regarding the requirements set forth in part 46, relating to protection of human subjects, as they pertain to demonstration projects approved under section 1115 of the Social Security Act, which test the use of cost-sharing, such as deductibles copayment and coinsurance, in the

Medicaid program. For further information see 47 FR 9208, March 4, 1982.]

PART 46--PROTECTION OF HUMAN SUBJECTS

Subpart A --Federal Policy for the Protection of Human Subjects (Basic DHHS Policy for Protection of Human Research Subjects)

[AUTHORITY: 5 U.S.C. 301; 42 U.S.C. 289, 42 U.S.C. 300v- 1(b).]

[SOURCE: 58 FR 28012, 28022, June 18, 1991, unless otherwise noted.]

§ 46.101 To what does this policy apply?

- a. Except as provided in paragraph (b) of this section, this policy applies to all research involving human subjects conducted, supported or otherwise subject to regulation by any federal department or agency which takes appropriate administrative action to make the policy applicable to such research. This includes research conducted by federal civilian employees or military personnel, except that each department or agency head may adopt such procedural modifications as may be appropriate from an administrative standpoint. It also includes research conducted, supported, or otherwise subject to regulation by the federal government outside the United States.
  1. Research that is conducted or supported by a federal department or agency, whether or not it is regulated as defined in §46.102(e), must comply with all sections of this policy.
  2. Research that is neither conducted nor supported by a federal department or agency, but is subject to regulation as defined in §46.102(e) must be reviewed and approved, in compliance with §46.101, §46.102, and §46.107 through §46.117 of this policy, by an institutional review board (IRB) that operates in accordance with the pertinent requirements of this policy.
- b. Unless otherwise required by department or agency heads, research activities, in which the only involvement of human subjects will be in one or more of the following categories, are exempt from this policy:
  1. Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.
  2. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability, or be damaging to the

subjects' financial standing, employability, or reputation.

3. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under paragraph (b)(2) of this section, if: (i) the human subjects are elected or appointed public officials or candidates for public office; or (ii) federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.
  4. Research, involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available, or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.
  5. Research and demonstration projects, which are conducted by or subject to the approval of department or agency heads, and which are designed to study, evaluate, or otherwise examine: (i) public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs.
  6. Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed, or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration, or approved by the Environmental Protection Agency, or the Food Safety and Inspection Service of the U.S. Department of Agriculture.
- c. Department or agency heads retain final judgment as to whether a particular activity is covered by this policy.
  - d. Department or agency heads may require that specific research activities or classes of research activities conducted, supported, or otherwise subject to regulation by the department or agency, but not otherwise covered by this policy, comply with some or all of the requirements of this policy.
  - e. Compliance with this policy requires compliance with pertinent federal laws or regulations which provide additional protections for human subjects.
  - f. This policy does not affect any state or local laws or regulations, which may otherwise be applicable, and which provide additional protections for human subjects.

- g. This policy does not affect any foreign laws or regulations, which may otherwise be applicable, and which provide additional protections to human subjects of research.
- h. When research covered by this policy takes place in foreign countries, procedures normally followed in the foreign countries to protect human subjects may differ from those set forth in this policy. [An example is a foreign institution, which complies with guidelines consistent with the World Medical Assembly Declaration (Declaration of Helsinki, amended 1989) issued either by sovereign states or by an organization, whose function for the protection of human research subjects is internationally recognized.] In these circumstances, if a department or agency head determines that the procedures prescribed by the institution afford protections that are at least equivalent to those provided in this policy, the department or agency head may approve the substitution of the foreign procedures in lieu of the procedural requirements provided in this policy. Except when otherwise required by statute, Executive Order, or the department or agency head, notices of these actions, as they occur, will be published in the FEDERAL REGISTER, or will be otherwise published, as provided in department or agency procedures.
- i. Unless otherwise required by law, department or agency heads may waive the applicability of some or all of the provisions of this policy to specific research activities or classes of research activities otherwise covered by this policy. Except when otherwise required by statute or Executive Order, the department or agency head shall forward advance notices of these actions to the Office for Protection from Research Risks, Department of Health and Human Services (HHS), and shall also publish them in the FEDERAL REGISTER or in such other manner, as provided in department or agency procedures.

[56 FR 28012, 28022, June 18, 1991; 56 FR 29756, June 28, 1991]

§46.102 Definitions.

- a. Department or agency head means the head of any federal department or agency, and any other officer or employee of any department or agency, to whom authority has been delegated.
- b. Institution means any public or private entity or agency (including federal, state, and other agencies).
- c. Legally authorized representative means an individual or judicial or other body, authorized under applicable law to consent on behalf of a prospective subject to the subject's participation in the procedure(s) involved in the research.
- d. Research means a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for purposes of this policy, whether or not they are conducted or supported under a program, which is considered research for other purposes. For example, some demonstration and

service programs may include research activities.

- e. Research subject to regulation, and similar terms are intended to encompass those research activities, for which a federal department or agency has specific responsibility for regulating as a research activity (for example, Investigational New Drug requirements administered by the Food and Drug Administration). It does not include research activities, which are incidentally regulated by a federal department or agency solely as part of the department's or agency's broader responsibility to regulate certain types of activities, whether research or non-research in nature (for example, Wage and Hour requirements administered by the Department of Labor).
- f. Human subject means a living individual, about whom an investigator (whether professional or student) conducting research obtains
  - 1. Data through intervention or interaction with the individual, or
  - 2. Identifiable private information.

Intervention includes both physical procedures, by which data are gathered (for example, venipuncture), and manipulations of the subject or the subject's environment that are performed for research purposes. Interaction includes communication or interpersonal contact between investigator and subject.

Private information includes information about behavior that occurs in a context, in which an individual can reasonably expect that no observation or recording is taking place, and information, which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator or associated with the information), in order for obtaining the information to constitute research involving human subjects.

- g. IRB means an institutional review board, established in accord with and for the purposes expressed in this policy.
- h. IRB approval means the determination of the IRB that the research has been reviewed and may be conducted at an institution within the constraints set forth by the IRB, and by other institutional and federal requirements.
- i. Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.
- j. Certification means the official notification by the institution to the supporting department or agency, in accordance with the requirements of this policy, that a research project or activity involving human

subjects has been reviewed and approved by an IRB in accordance with an approved assurance.

§ 46.103 Assuring compliance with this policy--research conducted or supported by any Federal Department or Agency.

- a. Each institution engaged in research which is covered by this policy, and which is conducted or supported by a federal department or agency, shall provide written assurance, satisfactory to the department or agency head, that it will comply with the requirements set forth in this policy. In lieu of requiring submission of an assurance, individual department or agency heads shall accept the existence of a current assurance, appropriate for the research in question, on file with the Office for Protection from Research Risks, HHS, and approved for federal-wide use by that office. When the existence of an approved assurance is accepted in lieu of requiring submission of an assurance, reports (except certification), required by this policy to be made to department and agency heads, shall also be made to the Office for Protection from Research Risks, HHS.
- b. Departments and agencies will conduct or support research covered by this policy, only if the institution has assurance approved as provided in this section, and only if the institution has certified to the department or agency head, that the research has been reviewed and approved by an IRB provided for in the assurance, and will be subject to continuing review by the IRB. Assurances applicable to federally supported or conducted research shall, at a minimum, include:
  1. A statement of principles governing the institution in the discharge of its responsibilities for protecting the rights and welfare of human subjects of research conducted at or sponsored by the institution, regardless of whether the research is subject to federal regulation. This may include an appropriate existing code, declaration, or statement of ethical principles, or a statement formulated by the institution itself. This requirement does not preempt provisions of this policy applicable to department- or agency-supported or regulated research, and need not be applicable to any research exempted or waived under §46.101 (b) or (i).
  2. Designation of one or more IRBs established in accordance with the requirements of this policy, and for which provisions are made for meeting space and sufficient staff to support the IRBs' review and record-keeping duties.
  3. A list of IRB members identified by name; earned degrees; representative capacity; indications of experience such as board certifications, licenses, etc., sufficient to describe each member's chief anticipated contributions to IRB deliberations; and any employment or other relationship between each member and the institution (for example: full-time employee, part-time employee, member of governing panel or board, stockholder, paid or unpaid consultant). Changes in IRB membership shall be reported to the department or agency head, unless in accord with §46.103(a) of this policy, the existence of an HHS-approved assurance is

accepted. In this case, change in IRB membership shall be reported to the Office for Protection from Research Risks, HHS.

4. Written procedures, which the IRB will follow (i) for conducting its initial and continuing review of research, and for reporting its findings and actions to the investigator and the institution; (ii) for determining, which projects require review more often than annually, and which projects need verification from sources other than the investigators that no material changes have occurred since previous IRB review; and (iii) for ensuring prompt reporting to the IRB of proposed changes in a research activity, and for ensuring that such changes in approved research, during the period for which IRB approval has already been given, may not be initiated without IRB review and approval, except when necessary to eliminate apparent immediate hazards to the subject.
  5. Written procedures for ensuring prompt reporting to the IRB, appropriate institutional officials, and the department or agency head, of (i) any unanticipated problems involving risks to subjects or others, or any serious or continuing noncompliance with this policy or the requirements or determinations of the IRB, and (ii) any suspension or termination of IRB approval.
- c. The assurance shall be executed by an individual authorized to act for the institution, and to assume on behalf of the institution the obligations imposed by this policy, and shall be filed in such form and manner as the department or agency head prescribes.
  - d. The department or agency head will evaluate all assurances submitted in accordance with this policy, through such officers and employees of the department or agency, and such experts or consultants engaged for this purpose as the department or agency head determines to be appropriate. The department or agency head's evaluation will take into consideration the adequacy of the proposed IRB, in light of the anticipated scope of the institution's research activities and the types of subject populations likely to be involved, the appropriateness of the proposed initial and continuing review procedures in light of the probable risks, and the size and complexity of the institution.
  - e. On the basis of this evaluation, the department or agency head may approve or disapprove the assurance, or enter into negotiations to develop an approvable one. The department or agency head may limit the period, during which any particular approved assurance or class of approved assurances shall remain effective, or otherwise condition or restrict approval.
  - f. Certification is required, when the research is supported by a federal department or agency, and not otherwise exempted or waived under §46.101 (b) or (i). An institution with an approved assurance shall certify that each application or proposal for research, covered by the assurance and by §46.103 of this Policy, has been reviewed and approved by the IRB. Such certification must be submitted with the application or proposal, or by such later date as may be prescribed by the department or agency, to which the application or proposal is

submitted. Under no condition shall research covered by §46.103 of the Policy be supported prior to receipt of the certification that the research has been reviewed and approved by the IRB. Institutions without an approved assurance covering the research shall certify within 30 days after receipt of a request for such a certification from the department or agency, that the application or proposal has been approved by the IRB. If the certification is not submitted within these time limits, the application or proposal may be returned to the institution.

(Approved by the Office of Management and Budget, under control number 9999-0020.)

[56 FR 28012, 28022, June 18, 1991; 56 FR 29756, June 28, 1991]

§§ 46.104-106 [Reserved]

§ 46.107 IRB membership.

- a. Each IRB shall have at least five members, with varying backgrounds to promote complete and adequate review of research activities commonly conducted by the institution. The IRB shall be sufficiently qualified through the experience and expertise of its members, and the diversity of the members, including consideration of race, gender, and cultural backgrounds, and sensitivity to such issues as community attitudes, to promote respect for its advice and counsel in safeguarding the rights and welfare of human subjects. In addition to possessing the professional competence necessary to review specific research activities, the IRB shall be able to ascertain the acceptability of proposed research in terms of institutional commitments and regulations, applicable law, and standards of professional conduct and practice. The IRB shall therefore include persons knowledgeable in these areas. If an IRB regularly reviews research that involves a vulnerable category of subjects, such as children, prisoners, pregnant women, or handicapped or mentally disabled persons, consideration shall be given to the inclusion of one or more individuals who are knowledgeable about and experienced in working with these subjects.
- b. Every nondiscriminatory effort will be made to ensure that no IRB consists entirely of men or entirely of women, including the institution's consideration of qualified persons of both sexes, so long as no selection is made to the IRB on the basis of gender. No IRB may consist entirely of members of one profession.
- c. Each IRB shall include at least one member whose primary concerns are in scientific areas, and at least one member whose primary concerns are in nonscientific areas.
- d. Each IRB shall include at least one member, who is not otherwise affiliated with the institution, and who is not part of the immediate family of a person who is affiliated with the institution.
- e. No IRB may have a member participate in the IRB's initial or continuing review of any project, in which the member has a conflicting interest,

except to provide information requested by the IRB.

- f. An IRB may, in its discretion, invite individuals with competence in special areas to assist in the review of issues, which require expertise beyond or in addition to that available on the IRB. These individuals may not vote with the IRB.

§ 46.108 IRB functions and operations.

In order to fulfill the requirements of this policy, each IRB shall:

- a. Follow written procedures in the same detail as described in §46.103(b)(4) and, to the extent required by §46.103(b)(5).
- b. Except when an expedited review procedure is used (see §46.110), review proposed research at convened meetings, at which a majority of the members of the IRB are present, including at least one member whose primary concerns are in nonscientific areas. In order for the research to be approved, it shall receive the approval of a majority of those members present at the meeting.

§ 46.109 IRB review of research.

- a. An IRB shall review, and have authority to approve, require modifications in (to secure approval), or disapprove all research activities covered by this policy.
- b. An IRB shall require that information given to subjects as part of informed consent is in accordance with §46.116. The IRB may require that information, in addition to that specifically mentioned in §46.116, be given to the subjects when, in the IRB's judgment, the information would meaningfully add to the protection of the rights and welfare of subjects.
- c. An IRB shall require documentation of informed consent, or may waive documentation in accordance with §46.117.
- d. An IRB shall notify investigators and the institution in writing of its decision to approve or disapprove the proposed research activity, or of modifications required to secure IRB approval of the research activity. If the IRB decides to disapprove a research activity, it shall include in its written notification a statement of the reasons for its decision, and give the investigator an opportunity to respond in person or in writing.
- e. An IRB shall conduct continuing review of research covered by this policy at intervals appropriate to the degree of risk, but not less than once per year, and shall have authority to observe or have a third party observe the consent process and the research.

(Approved by the Office of Management and Budget, under control number 9999-0020.)

§ 46.110 Expedited review procedures for certain kinds of research involving

no more than minimal risk, and for minor changes in approved research.

- a. The Secretary, HHS, has established, and published as a Notice in the FEDERAL REGISTER, a list of categories of research that may be reviewed by the IRB through an expedited review procedure. The list will be amended, as appropriate after consultation with other departments and agencies, through periodic republication by the Secretary, HHS, in the FEDERAL REGISTER. A copy of the list is available from the Office for Protection from Research Risks, National Institutes of Health, HHS, Bethesda, Maryland 20892.

[Editor: See Addendum 46 FR 8392 at the end of this document.]

- b. An IRB may use the expedited review procedure to review either or both of the following:
  1. Some or all of the research appearing on the list and found by the reviewer(s) to involve no more than minimal risk.
  2. Minor changes in previously approved research during the period (of one year or less), for which approval is authorized.

Under an expedited review procedure, the review may be carried out by the IRB chairperson, or by one or more experienced reviewers designated by the chairperson from among members of the IRB. In reviewing the research, the reviewers may exercise all of the authorities of the IRB, except that the reviewers may not disapprove the research. A research activity may be disapproved only after review in accordance with the non-expedited procedure set forth in §46.108(b).

- c. Each IRB, which uses an expedited review procedure shall adopt a method for keeping all members advised of research proposals, which have been approved under the procedure.
- d. The department or agency head may restrict, suspend, terminate, or choose not to authorize an institution's or IRB's use of the expedited review procedure.

§ 46.111 Criteria for IRB approval of research.

- a. In order to approve research covered by this policy, the IRB shall determine that all of the following requirements are satisfied:
  1. Risks to subjects are minimized: (i) by using procedures which are consistent with sound research design, and which do not unnecessarily expose subjects to risk, and (ii) whenever appropriate, by using procedures already being performed on the subjects for diagnostic or treatment purposes.
  2. Risks to subjects are reasonable in relation to anticipated benefits, if any, to subjects, and the importance of the knowledge that may reasonably be expected to result. In evaluating risks and benefits, the IRB should consider only those risks and benefits

that may result from the research (as distinguished from risks and benefits of therapies subjects would receive, even if not participating in the research). The IRB should not consider possible long-range effects of applying knowledge gained in the research (for example, the possible effects of the research on public policy) as among those research risks that fall within the purview of its responsibility.

3. Selection of subjects is equitable. In making this assessment, the IRB should take into account the purposes of the research, and the setting in which the research will be conducted, and should be particularly cognizant of the special problems of research involving vulnerable populations, such as children, prisoners, pregnant women, mentally disabled persons, or economically or educationally disadvantaged persons.
  4. Informed consent will be sought from each prospective subject or the subject's legally authorized representative, in accordance with, and to the extent required by §46.116.
  5. Informed consent will be appropriately documented, in accordance with, and to the extent required by §46.117.
  6. When appropriate, the research plan makes adequate provision for monitoring the data collected, to ensure the safety of subjects.
  7. When appropriate, there are adequate provisions to protect the privacy of subjects, and to maintain the confidentiality of data.
- b. When some or all of the subjects are likely to be vulnerable to coercion or undue influence, such as children, prisoners, pregnant women, mentally disabled persons, or economically or educationally disadvantaged persons, additional safeguards have been included in the study to protect the rights and welfare of these subjects.

§ 46.112 Review by institution.

Research covered by this policy that has been approved by an IRB may be subject to further appropriate review and approval or disapproval by officials of the institution. However, those officials may not approve the research, if it has not been approved by an IRB.

§ 46.113 Suspension or termination of IRB-approval of research.

An IRB shall have authority to suspend or terminate approval of research that is not being conducted in accordance with the IRB's requirements, or that has been associated with unexpected serious harm to subjects. Any suspension or termination of approval shall include a statement of the reasons for the IRB's action, and shall be reported promptly to the investigator, appropriate institutional officials, and the department or agency head.

(Approved by the Office of Management and Budget, under control number 9999-0020.)

§ 46.114 Cooperative research.

Cooperative research projects are those projects covered by this policy, which involve more than one institution. In the conduct of cooperative research projects, each institution is responsible for safeguarding the rights and welfare of human subjects and for complying with this policy. With the approval of the department or agency head, an institution participating in a cooperative project may enter into a joint review arrangement, rely upon the review of another qualified IRB, or make similar arrangements for avoiding duplication of effort.

§ 46.115 IRB records.

a. An institution, or when appropriate an IRB, shall prepare and maintain adequate documentation of IRB activities, including the following:

1. Copies of all research proposals reviewed, scientific evaluations, if any, that accompany the proposals, approved sample consent documents, progress reports submitted by investigators, and reports of injuries to subjects.
2. Minutes of IRB meetings, which shall be in sufficient detail to show attendance at the meetings; actions taken by the IRB; the vote on these actions, including the number of members voting for, against, and abstaining; the basis for requiring changes in or disapproving research; and a written summary of the discussion of controverted issues and their resolution.
3. Records of continuing review activities.
4. Copies of all correspondence between the IRB and the investigators.
5. A list of IRB members, in the same detail as described in §46.103 (b) (3).
6. Written procedures for the IRB, in the same detail as described in §46.103 (b) (4) and §46.103 (b) (5).
7. Statements of significant new findings provided to subjects, as required by §46.116 (b) (5).

b. The records required by this policy shall be retained for at least 3 years, and records relating to research which is conducted shall be retained for at least 3 years after completion of the research. All records shall be accessible for inspection and copying by authorized representatives of the department or agency at reasonable times and in a reasonable manner.

(Approved by the Office of Management and Budget, under control number 9999-0020.)

§ 46.116 General requirements for informed consent.

Except as provided elsewhere in this policy, no investigator may involve a human being as a subject in research covered by this policy, unless the investigator has obtained the legally effective informed consent of the subject or the subject's legally authorized representative. An investigator shall seek such consent only under circumstances that provide the prospective subject or the representative sufficient opportunity to consider whether or not to participate, and that minimize the possibility of coercion or undue influence. The information that is given to the subject or the representative shall be in language understandable to the subject or the representative. No informed consent, whether oral or written, may include any exculpatory language, through which the subject or the representative is made to waive or appear to waive any of the subject's legal rights, or releases or appears to release the investigator, the sponsor, the institution or its agents from liability for negligence.

a. Basic elements of informed consent. Except as provided in paragraph (c) or (d) of this section, in seeking informed consent, the following information shall be provided to each subject:

1. A statement that the study involves research, an explanation of the purposes of the research, and the expected duration of the subject's participation, a description of the procedures to be followed, and identification of any procedures which are experimental;
2. A description of any reasonably foreseeable risks or discomforts to the subject;
3. A description of any benefits to the subject or to others which may reasonably be expected from the research;
4. A disclosure of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to the subject;
5. A statement describing the extent, if any, to which confidentiality of records identifying the subject will be maintained;
6. For research involving more than minimal risk, an explanation as to whether any compensation, and an explanation as to whether any medical treatments are available, if injury occurs and, if so, what they consist of, or where further information may be obtained;
7. An explanation of whom to contact for answers to pertinent questions about the research and research subjects' rights, and whom to contact in the event of a research-related injury to the subject; and
8. A statement that participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled, and the subject may discontinue participation at any time without penalty or loss of benefits, to

which the subject is otherwise entitled.

b. Additional elements of informed consent. When appropriate, one or more of the following elements of information shall also be provided to each subject:

1. A statement that the particular treatment or procedure may involve risks to the subject (or to the embryo or fetus, if the subject is or may become pregnant), which are currently unforeseeable;
2. Anticipated circumstances under which the subject's participation may be terminated by the investigator without regard to the subject's consent;
3. Any additional costs to the subject that may result from participation in the research;
4. The consequences of a subject's decision to withdraw from the research, and procedures for orderly termination of participation by the subject;
5. A statement that significant new findings developed during the course of the research, which may relate to the subject's willingness to continue participation, will be provided to the subject; and
6. The approximate number of subjects involved in the study.

c. An IRB may approve a consent procedure, which does not include, or which alters, some or all of the elements of informed consent set forth above, or waive the requirement to obtain informed consent, provided the IRB finds and documents that:

1. The research or demonstration project is to be conducted by, or subject to the approval of, state or local government officials, and is designed to study, evaluate, or otherwise examine: (i) public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs; and
2. The research could not practicably be carried out without the waiver or alteration.

d. An IRB may approve a consent procedure, which does not include, or which alters, some or all of the elements of informed consent set forth in this section, or waive the requirements to obtain informed consent, provided the IRB finds and documents that:

1. The research involves no more than minimal risk to the subjects;
2. The waiver or alteration will not adversely affect the rights and welfare of the subjects;

3. The research could not practicably be carried out without the waiver or alteration; and
4. Whenever appropriate, the subjects will be provided with additional pertinent information after participation.
- e. The informed consent requirements in this policy are not intended to preempt any applicable federal, state, or local laws, which require additional information to be disclosed, in order for informed consent to be legally effective.
- f. Nothing in this policy is intended to limit the authority of a physician to provide emergency medical care, to the extent the physician is permitted to do so under applicable federal, state, or local law.

(Approved by the Office of Management and Budget, under control number 9999-0020.)

§ 46.117 Documentation of informed consent.

- a. Except as provided in paragraph (c) of this section, informed consent shall be documented by the use of a written consent form approved by the IRB, and signed by the subject or the subject's legally authorized representative. A copy shall be given to the person signing the form.
- b. Except as provided in paragraph (c) of this section, the consent form may be either of the following:
  1. A written consent document that embodies the elements of informed consent required by §46.116. This form may be read to the subject or the subject's legally authorized representative, but in any event, the investigator should give either the subject or the representative adequate opportunity to read it before it is signed.
  2. A short form written consent document, stating that the elements of informed consent required by §46.116 have been presented orally to the subject or the subject's legally authorized representative. When this method is used, there shall be a witness to the oral presentation. Also, the IRB shall approve a written summary of what is to be said to the subject or the representative. Only the short form itself is to be signed by the subject or the representative. However, the witness shall sign both the short form and a copy of the summary, and the person actually obtaining consent shall sign a copy of the summary. A copy of the summary shall be given to the subject or the representative, in addition to a copy of the short form.
- c. An IRB may waive the requirement for the investigator to obtain a signed consent form for some or all subjects, if it finds either:
  1. That the only record linking the subject and the research would be

the consent document, and the principal risk would be potential harm resulting from a breach of confidentiality. Each subject will be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes will govern; or

2. That the research presents no more than minimal risk of harm to subjects, and involves no procedures, for which written consent is normally required outside of the research context.

In cases, in which the documentation requirement is waived, the IRB may require the investigator to provide subjects with a written statement regarding the research.

(Approved by the Office of Management and Budget, under control number 9999-0020.)

§ 46.118 Applications and proposals lacking definite plans for involvement of human subjects.

Certain types of applications for grants, cooperative agreements, or contracts are submitted to departments or agencies, with the knowledge that subjects may be involved within the period of support, but definite plans would not normally be set forth in the application or proposal. These include activities such as institutional-type grants, when selection of specific projects is the institution's responsibility; research training grants, in which the activities involving subjects remain to be selected; and projects in which human subjects' involvement will depend upon completion of instruments, prior animal studies, or purification of compounds. These applications need not be reviewed by an IRB before an award may be made. However, except for research exempted or waived under §46.101 (b) or (i), no human subjects may be involved in any project supported by these awards, until the project has been reviewed and approved by the IRB, as provided in this policy, and certification submitted, by the institution, to the department or agency.

§ 46.119 Research undertaken without the intention of involving human subjects.

In the event research is undertaken without the intention of involving human subjects, but it is later proposed to involve human subjects in the research, the research shall first be reviewed and approved by an IRB, as provided in this policy, a certification submitted, by the institution, to the department or agency, and final approval given to the proposed change by the department or agency.

§ 46.120 Evaluation and disposition of application and proposals for research to be conducted or supported by a Federal Department or Agency.

- a. The department or agency head will evaluate all applications and proposals involving human subjects submitted to the department or agency, through such officers and employees of the department or agency, and such experts and consultants as the department or agency head determines to be appropriate. This evaluation will take into

consideration the risks to the subjects, the adequacy of protection against these risks, the potential benefits of the research to the subjects and others, and the importance of the knowledge gained or to be gained.

- b. On the basis of this evaluation, the department or agency head may approve or disapprove the application or proposal, or enter into negotiations to develop an approvable one.

§ 46.121 [Reserved]

§ 46.122 Use of Federal funds.

Federal funds administered by a department or agency may not be expended for research involving human subjects, unless the requirements of this policy have been satisfied.

§ 46.123 Early termination of research support: Evaluation of applications and proposals.

- a. The department or agency head may require that department or agency support for any project be terminated or suspended, in the manner prescribed in applicable program requirements, when the department or agency head finds an institution has materially failed to comply with the terms of this policy.
- b. In making decisions about supporting or approving applications or proposals covered by this policy, the department or agency head may take into account, in addition to all other eligibility requirements and program criteria, factors such as whether the applicant has been subject to a termination or suspension under paragraph (a) of this section, and whether the applicant or the person or persons, who would direct or has or have directed the scientific and technical aspects of an activity, has or have, in the judgment of the department or agency head, materially failed to discharge responsibility for the protection of the rights and welfare of human subjects (whether or not the research was subject to federal regulation).

§ 46.124 Conditions.

With respect to any research project or any class of research projects, the department or agency head may impose additional conditions prior to or at the time of approval, when, in the judgment of the department or agency head, additional conditions are necessary for the protection of human subjects.

Subpart B --Additional Protections Pertaining to Research, Development, and Related Activities Involving Fetuses, Pregnant Women, and Human in vitro Fertilization

[SOURCE: 40 FR 33528, August 8, 1975, unless otherwise noted.]

§ 46.201 Applicability.

- a. The regulations in this subpart are applicable to all Department of Health and Human Services grants and contracts supporting research, development, and related activities involving: (1) the fetus, (2) pregnant women, and (3) human in vitro fertilization.
- b. Nothing in this subpart shall be construed as indicating that compliance with the procedures set forth herein will in any way render inapplicable pertinent State or local laws bearing upon activities covered by this subpart.
- c. The requirements of this subpart are in addition to those imposed under the other subparts of this part.

§ 46.202 Purpose.

It is the purpose of this subpart to provide additional safeguards in reviewing activities, to which this subpart is applicable, to assure that they conform to appropriate ethical standards and relate to important societal needs.

§ 46.203 Definitions.

As used in this subpart:

- a. Secretary means the Secretary of Health and Human Services and any other officer or employee of the Department of Health and Human Services, to whom authority has been delegated.
- b. Pregnancy encompasses the period of time from confirmation of implantation (through any of the presumptive signs of pregnancy, such as missed menses, or by a medically acceptable pregnancy test), until expulsion or extraction of the fetus.
- c. Fetus means the product of conception from the time of implantation (as evidenced by any of the presumptive signs of pregnancy, such as missed menses, or a medically acceptable pregnancy test), until a determination is made, following expulsion or extraction of the fetus, that it is viable.
- d. Viable as it pertains to the fetus means being able, after either spontaneous or induced delivery, to survive (given the benefit of available medical therapy) to the point of independently maintaining heart beat and respiration. The Secretary may from time to time, taking into account medical advances, publish in the FEDERAL REGISTER, guidelines to assist in determining whether a fetus is viable for purposes of this subpart. If a fetus is viable after delivery, it is a premature infant.
- e. Nonviable fetus means a fetus ex utero, which, although living, is not viable.
- f. Dead fetus means a fetus ex utero, which exhibits neither heartbeat, spontaneous respiratory activity, spontaneous movement of voluntary muscles, nor pulsation of the umbilical cord (if still attached).

- g. In vitro fertilization means any fertilization of human ova, which occurs outside the body of a female, either through admixture of donor human sperm and ova, or by any other means.

[40 FR 33528, August 8, 1975, as amended at 43 FR 1759, January 11, 1978]

§ 46.204 Ethical Advisory Boards.

- a. One or more Ethical Advisory Boards shall be established by the Secretary. Members of these board(s) shall be so selected, that the board(s) will be competent to deal with medical, legal, social, ethical, and related issues, and may include, for example, research scientists, physicians, psychologists, sociologists, educators, lawyers, and ethicists, as well as representatives of the general public. No board member may be a regular, full-time employee of the Department of Health and Human Services.
- b. At the request of the Secretary, the Ethical Advisory Board shall render advice consistent with the policies and requirements of this part as to ethical issues, involving activities covered by this subpart, raised by individual applications or proposals. In addition, upon request by the Secretary, the Board shall render advice as to classes of applications or proposals and general policies, guidelines, and procedures.
- c. A Board may establish, with the approval of the Secretary, classes of applications or proposals which: (1) must be submitted to the Board, or (2) need not be submitted to the Board. Where the Board so establishes a class of applications or proposals, which must be submitted, no application or proposal within the class may be funded by the Department or any component thereof, until the application or proposal has been reviewed by the Board, and the Board has rendered advice as to its acceptability from an ethical standpoint.

[40 FR 33528, August 8, 1975, as amended at 43 FR 1759, January 11, 1978; 59 FR 28276, June 1, 1994]

§ 46.205 Additional duties of the Institutional Review Boards in connection with activities involving fetuses, pregnant women, or human in vitro fertilization.

- a. In addition to the responsibilities prescribed for Institutional Review Boards under Subpart A of this part, the applicant's or offeror's Board shall, with respect to activities covered by this subpart, carry out the following additional duties:
1. Determine that all aspects of the activity meet the requirements of this subpart;
  2. Determine that adequate consideration has been given to the manner in which potential subjects will be selected, and adequate provision has been made by the applicant or offeror for monitoring the actual informed consent process (e.g., through such

mechanisms, when appropriate, as participation by the Institutional Review Board or subject advocates in: (i) overseeing the actual process by which individual consents required by this subpart are secured, either by approving induction of each individual into the activity, or verifying, perhaps through sampling, that approved procedures for induction of individuals into the activity are being followed, and (ii) monitoring the progress of the activity and intervening as necessary, through such steps as visits to the activity site, and continuing evaluation to determine if any unanticipated risks have arisen);

3. Carry out such other responsibilities, as may be assigned by the Secretary.

b. No award may be issued until the applicant or offeror has certified to the Secretary that the Institutional Review Board has made the determinations required under paragraph (a) of this section, and the Secretary has approved these determinations, as provided in §46.120 of Subpart A of this part.

c. Applicants or offerors seeking support for activities covered by this subpart must provide for the designation of an Institutional Review Board, subject to approval by the Secretary, where no such Board has been established under Subpart A of this part.

[40 FR 33628, August 8, 1975, as amended at 46 FR 8386, January 26, 1981]

§ 46.206 General limitations.

a. No activity, to which this subpart is applicable, may be undertaken, unless:

1. Appropriate studies on animals and nonpregnant individuals have been completed;
2. Except where the purpose of the activity is to meet the health needs of the mother or the particular fetus, the risk to the fetus is minimal and, in all cases, is the least possible risk for achieving the objectives of the activity;
3. Individuals engaged in the activity will have no part in (i) any decisions as to the timing, method, and procedures used to terminate the pregnancy, and (ii) determining the viability of the fetus at the termination of the pregnancy; and
4. No procedural changes, which may cause greater than minimal risk to the fetus or the pregnant woman will be introduced into the procedure for terminating the pregnancy, solely in the interest of the activity.

b. No inducements, monetary or otherwise, may be offered to terminate pregnancy for purposes of the activity.

[40 FR 33628, August 8, 1975, as amended at 40 FR 51638, November 6, 1975]

§ 46.207 Activities directed toward pregnant women as subjects.

- a. No pregnant woman may be involved as a subject in an activity covered by this subpart, unless: (1) the purpose of the activity is to meet the health needs of the mother, and the fetus will be placed at risk only to the minimum extent necessary to meet such needs, or (2) the risk to the fetus is minimal.
- b. An activity permitted under paragraph (a) of this section may be conducted, only if the mother and father are legally competent and have given their informed consent after having been fully informed regarding possible impact on the fetus, except that the father's informed consent need not be secured, if: (1) the purpose of the activity is to meet the health needs of the mother; (2) his identity or whereabouts cannot reasonably be ascertained; (3) he is not reasonably available; or (4) the pregnancy resulted from rape.

§ 46.208 Activities directed toward fetuses in utero as subjects.

- a. No fetus in utero may be involved as a subject in any activity covered by this subpart, unless: (1) the purpose of the activity is to meet the health needs of the particular fetus, and the fetus will be placed at risk only to the minimum extent necessary to meet such needs, or (2) the risk to the fetus imposed by the research is minimal, and the purpose of the activity is the development of important biomedical knowledge which cannot be obtained by other means.
- b. An activity permitted under paragraph (a) of this section may be conducted, only if the mother and father are legally competent and have given their informed consent, except that the father's consent need not be secured, if: (1) his identity or whereabouts cannot reasonably be ascertained; (2) he is not reasonably available, or (3) the pregnancy resulted from rape.

§ 46.209 Activities directed toward fetuses ex utero, including nonviable fetuses as subjects.

- a. Until it has been ascertained whether or not a fetus ex utero is viable, a fetus ex utero may not be involved as a subject in an activity covered by this subpart, unless:
  1. There will be no added risk to the fetus resulting from the activity, and the purpose of the activity is the development of important biomedical knowledge, which cannot be obtained by other means, or
  2. The purpose of the activity is to enhance the possibility of survival of the particular fetus to the point of viability.
- b. No nonviable fetus may be involved as a subject in an activity covered by this subpart, unless:
  1. Vital functions of the fetus will not be artificially maintained;

2. Experimental activities, which of themselves would terminate the heartbeat or respiration of the fetus, will not be employed; and
  3. The purpose of the activity is the development of important biomedical knowledge, which cannot be obtained by other means.
- c. In the event the fetus ex utero is found to be viable, it may be included as a subject in the activity, only to the extent permitted by and in accordance with the requirements of other subparts of this part.
  - d. An activity permitted under paragraph (a) or (b) of this section may be conducted, only if the mother and father are legally competent and have given their informed consent, except that the father's informed consent need not be secured, if: (1) his identity or whereabouts cannot reasonably be ascertained; (2) he is not reasonably available; or (3) the pregnancy resulted from rape.

[40 FR 33528, August 8, 1975, as amended at 43 FR 1759, January 11, 1978]

§ 46.210 Activities involving the dead fetus, fetal material, or the placenta.

Activities involving the dead fetus, macerated fetal material, or cells, tissue, or organs excised from a dead fetus shall be conducted, only in accordance with any applicable State or local laws regarding such activities.

§ 46.211 Modification or waiver of specific requirements.

Upon the request of an applicant or offeror (with the approval of its Institutional Review Board), the Secretary may modify or waive specific requirements of this subpart, with the approval of the Ethical Advisory Board after such opportunity for public comment, as the Ethical Advisory Board considers appropriate in the particular instance. In making such decisions, the Secretary will consider whether the risks to the subject are so outweighed by the sum of the benefit to the subject, and the importance of the knowledge to be gained, as to warrant such modification or waiver, and that such benefits cannot be gained except through a modification or waiver. Any such modifications or waivers will be published as notices in the FEDERAL REGISTER.

Subpart C --Additional Protections Pertaining to Biomedical and Behavioral Research Involving Prisoners as Subjects

[SOURCE: 43 FR 53655, November 16, 1978, unless otherwise noted.]

§ 46.301 Applicability.

- a. The regulations in this subpart are applicable to all biomedical and behavioral research conducted or supported by the Department of Health and Human Services involving prisoners as subjects.
- b. Nothing in this subpart shall be construed as indicating that

compliance with the procedures set forth herein will authorize research involving prisoners as subjects, to the extent, such research is limited or barred by applicable State or local law.

- c. The requirements of this subpart are in addition to those imposed under the other subparts of this part.

§ 46.302 Purpose.

Inasmuch as prisoners may be under constraints because of their incarceration, which could affect their ability to make a truly voluntary and uncoerced decision whether or not to participate as subjects in research, it is the purpose of this subpart to provide additional safeguards for the protection of prisoners involved in activities to which this subpart is applicable.

§ 46.303 Definitions.

As used in this subpart:

- a. Secretary means the Secretary of Health and Human Services, and any other officer or employee of the Department of Health and Human Services, to whom authority has been delegated.
- b. DHHS means the Department of Health and Human Services.
- c. Prisoner means any individual involuntarily confined or detained in a penal institution. The term is intended to encompass individuals sentenced to such an institution under a criminal or civil statute, individuals detained in other facilities by virtue of statutes or commitment procedures, which provide alternatives to criminal prosecution or incarceration in a penal institution, and individuals detained pending arraignment, trial, or sentencing.
- d. Minimal risk is the probability and magnitude of physical or psychological harm that is normally encountered in the daily lives, or in the routine medical, dental, or psychological examination of healthy persons.

§ 46.304 Composition of Institutional Review Boards where prisoners are involved.

In addition to satisfying the requirements in §46.107 of this part, an Institutional Review Board, carrying out responsibilities under this part with respect to research covered by this subpart, shall also meet the following specific requirements:

- a. A majority of the Board (exclusive of prisoner members) shall have no association with the prison(s) involved, apart from their membership on the Board.
- b. At least one member of the Board shall be a prisoner, or a prisoner representative with appropriate background and experience to serve in that capacity, except that, where a particular research project is

reviewed by more than one Board, only one Board need satisfy this requirement.

[43 FR 53655, November 16, 1978, as amended at 46 FR 8386, January 26, 1981]

§ 46.305 Additional duties of the Institutional Review Boards where prisoners are involved.

- a. In addition to all other responsibilities prescribed for Institutional Review Boards under this part, the Board shall review research covered by this subpart and approve such research only if it finds that:
  1. The research under review represents one of the categories of research permissible under §46.306(a)(2);
  2. Any possible advantages accruing to the prisoner through his or her participation in the research, when compared to the general living conditions, medical care, quality of food, amenities and opportunity for earnings in the prison, are not of such a magnitude that his or her ability to weigh the risks of the research against the value of such advantages in the limited choice environment of the prison is impaired;
  3. The risks involved in the research are commensurate with risks that would be accepted by nonprisoner volunteers;
  4. Procedures for the selection of subjects within the prison are fair to all prisoners, and immune from arbitrary intervention by prison authorities or prisoners. Unless the principal investigator provides to the Board justification in writing for following some other procedures, control subjects must be selected randomly from the group of available prisoners, who meet the characteristics needed for that particular research project;
  5. The information is presented in language which is understandable to the subject population;
  6. Adequate assurance exists that parole boards will not take into account a prisoner's participation in the research in making decisions regarding parole, and each prisoner is clearly informed in advance that participation in the research will have no effect on his or her parole; and
  7. Where the Board finds there may be a need for follow-up examination or care of participants after the end of their participation, adequate provision has been made for such examination or care, taking into account the varying lengths of individual prisoner's sentences, and for informing participants of this fact.
- b. The Board shall carry out such other duties as may be assigned by the Secretary.
- c. The institution shall certify to the Secretary, in such form and manner

as the Secretary may require, that the duties of the Board under this section have been fulfilled.

§ 46.306 Permitted research involving prisoners.

- a. Biomedical or behavioral research conducted or supported by DHHS may involve prisoners as subjects, only if:
  1. The institution responsible for the conduct of the research has certified to the Secretary that the Institutional Review Board has approved the research under §46.305 of this subpart; and
  2. In the judgment of the Secretary the proposed research involves solely the following: (i) Study of the possible causes, effects, and processes of incarceration and of criminal behavior, provided that the study presents no more than minimal risk, and no more than inconvenience to the subjects; (ii) Study of prisons as institutional structures, or of prisoners as incarcerated persons, provided that the study presents no more than minimal risk, and no more than inconvenience to the subjects; (iii) Research on conditions particularly affecting prisoners as a class (for example, vaccine trials and other research on hepatitis, which is much more prevalent in prisons than elsewhere; and research on social and psychological problems, such as alcoholism, drug addiction and sexual assaults), provided that the study may proceed only after the Secretary has consulted with appropriate experts, including experts in penology medicine and ethics, and published notice, in the FEDERAL REGISTER, of his intent to approve such research; or (iv) Research on practices, both innovative and accepted, which have the intent and reasonable probability of improving the health or well-being of the subject. In cases, in which those studies require the assignment of prisoners in a manner consistent with protocols approved by the IRB to control groups which may not benefit from the research, the study may proceed only after the Secretary has consulted with appropriate experts, including experts in penology medicine and ethics, and published notice, in the FEDERAL REGISTER, of his intent to approve such research.
- b. Except as provided in paragraph (a) of this section, biomedical or behavioral research conducted or supported by DHHS shall not involve prisoners as subjects.

Subpart D --Additional Protections for Children involved as Subjects in Research

[SOURCE: 48 FR 9818, March 8, 1983, unless otherwise noted.]

§ 46.401 To what do these regulations apply?

- a. This subpart applies to all research involving children as subjects, conducted or supported by the Department of Health and Human Services.
  1. This includes research conducted by Department employees, except

that each head of an Operating Division of the Department may adopt such nonsubstantive, procedural modifications as may be appropriate from an administrative standpoint.

2. It also includes research conducted or supported by the Department of Health and Human Services outside the United States, but in appropriate circumstances, the Secretary may, under paragraph (e) of §46.101 of Subpart A, waive the applicability of some or all of the requirements of these regulations for research of this type.
- b. Exemptions at §46.101(b)(1) and (b)(3) through (b)(6) are applicable to this subpart. The exemption at §46.101(b)(2) regarding educational tests is also applicable to this subpart. However, the exemption at §46.101(b)(2) for research involving survey or interview procedures or observations of public behavior does not apply to research covered by this subpart, except for research involving observation of public behavior, when the investigator(s) do not participate in the activities being observed.
- c. The exceptions, additions, and provisions for waiver, as they appear in paragraphs (c) through (i) of §46.101 of Subpart A, are applicable to this subpart.

[48 FR 9818, March 8, 1983; 56 FR 28032, June 18, 1991; 56 FR 29757, June 28, 1991]

#### § 46.402 Definitions.

The definitions in §46.102 of Subpart A shall be applicable to this subpart as well. In addition, as used in this subpart:

- a. Children are persons, who have not attained the legal age for consent to treatments or procedures involved in the research, under the applicable law of the jurisdiction in which the research will be conducted.
- b. Assent means a child's affirmative agreement to participate in research. Mere failure to object should not, absent affirmative agreement, be construed as assent.
- c. Permission means the agreement of parent(s) or guardian to the participation of their child or ward in research.
- d. Parent means a child's biological or adoptive parent.
- e. Guardian means an individual, who is authorized under applicable State or local law, to consent on behalf of a child to general medical care.

#### § 46.403 IRB duties.

In addition to other responsibilities assigned to IRBs under this part, each IRB shall review research covered by this subpart, and approve only research which satisfies the conditions of all applicable sections of this subpart.

§ 46.404 Research not involving greater than minimal risk.

HHS will conduct or fund research, in which the IRB finds that no greater than minimal risk to children is presented, only if the IRB finds that adequate provisions are made for soliciting the assent of the children and the permission of their parents or guardians, as set forth in §46.408.

§ 46.405 Research involving greater than minimal risk, but presenting the prospect of direct benefit to the individual subjects.

HHS will conduct or fund research, in which the IRB finds that more than minimal risk to children is presented by an intervention or procedure that holds out the prospect of direct benefit for the individual subject, or by a monitoring procedure that is likely to contribute to the subject's well-being, only if the IRB finds that:

- a. The risk is justified by the anticipated benefit to the subjects;
- b. The relation of the anticipated benefit to the risk is at least as favorable to the subjects as that presented by available alternative approaches; and
- c. Adequate provisions are made for soliciting the assent of the children and permission of their parents or guardians, as set forth in §46.408.

§ 46.406 Research involving greater than minimal risk and no prospect of direct benefit to individual subjects, but likely to yield generalizable knowledge about the subject's disorder or condition.

HHS will conduct or fund research, in which the IRB finds that more than minimal risk to children is presented by an intervention or procedure that does not hold out the prospect of direct benefit for the individual subject, or by a monitoring procedure which is not likely to contribute to the well-being of the subject, only if the IRB finds that:

- a. The risk represents a minor increase over minimal risk;
- b. The intervention or procedure presents experiences to subjects that are reasonably commensurate with those inherent in their actual or expected medical, dental, psychological, social or educational situations;
- c. The intervention or procedure is likely to yield generalizable knowledge about the subjects' disorder or condition, which is of vital importance for the understanding or amelioration of the subjects' disorder or condition; and
- d. Adequate provisions are made for soliciting assent of the children and permission of their parents or guardians, as set forth in §46.408.

§ 46.407 Research not otherwise approvable, which presents an opportunity to understand, prevent, or alleviate a serious problem affecting the health or welfare of children.

HHS will conduct or fund research that the IRB does not believe meets the

requirements of §46.404, §46.405, or §46.406, only if:

- a. 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 children, and
- b. The Secretary, after consultation with a panel of experts in pertinent disciplines (for example: science, medicine, education, ethics, law), and following opportunity for public review and comment, has determined either:
  1. That the research in fact satisfies the conditions of §46.404, §46.405, or §46.406, as applicable, or
  2. The following: (i) the research presents a reasonable opportunity to further the understanding, prevention, or alleviation of a serious problem affecting the health or welfare of children; (ii) the research will be conducted in accordance with sound ethical principles; (iii) adequate provisions are made for soliciting the assent of children and the permission of their parents or guardians, as set forth in §46.408.

§ 46.408 Requirements for permission by parents or guardians and for assent by children.

- a. In addition to the determinations required under other applicable sections of this subpart, the IRB shall determine that adequate provisions are made for soliciting the assent of the children, when in the judgment of the IRB the children are capable of providing assent. In determining whether children are capable of assenting, the IRB shall take into account the ages, maturity, and psychological state of the children involved. This judgment may be made for all children to be involved in research under a particular protocol, or for each child, as the IRB deems appropriate. If the IRB determines that the capability of some or all of the children is so limited that they cannot reasonably be consulted, or that the intervention or procedure involved in the research holds out a prospect of direct benefit that is important to the health or well-being of the children, and is available only in the context of the research, the assent of the children is not a necessary condition for proceeding with the research. Even where the IRB determines that the subjects are capable of assenting, the IRB may still waive the assent requirement under circumstances, in which consent may be waived in accord with §46.116 of Subpart A.
- b. In addition to the determinations required under other applicable sections of this subpart, the IRB shall determine, in accordance with and to the extent that consent is required by §46.116 of Subpart A, that adequate provisions are made for soliciting the permission of each child's parents or guardian. Where parental permission is to be obtained, the IRB may find that the permission of one parent is sufficient for research to be conducted under §46.404 or §46.405. Where research is covered by §46.406 and §46.407, and permission is to be obtained from parents, both parents must give their permission, unless one parent is deceased, unknown, incompetent, or not reasonably

available, or when only one parent has legal responsibility for the care and custody of the child.

- c. In addition to the provisions for waiver contained in §46.116 of Subpart A, if the IRB determines that a research protocol is designed for conditions or for a subject population, for which parental or guardian permission is not a reasonable requirement to protect the subjects (for example, neglected or abused children), it may waive the consent requirements in Subpart A of this part and paragraph (b) of this section, provided an appropriate mechanism for protecting the children who will participate as subjects in the research is substituted, and provided further that the waiver is not inconsistent with Federal, state or local law. The choice of an appropriate mechanism would depend upon the nature and purpose of the activities described in the protocol, the risk and anticipated benefit to the research subjects, and their age, maturity, status, and condition.
- d. Permission by parents or guardians shall be documented in accordance with and to the extent required by §46.117 of Subpart A.
- e. When the IRB determines that assent is required, it shall also determine whether and how assent must be documented.

§ 46.409 Wards

- a. Children, who are wards of the state or any other agency, institution, or entity can be included in research approved under §46.406 or §46.407, only if such research is:
  - 1. Related to their status as wards; or
  - 2. Conducted in schools, camps, hospitals, institutions, or similar settings, in which the majority of children involved as subjects are not wards.
- b. If the research is approved under paragraph (a) of this section, the IRB shall require appointment of an advocate for each child who is a ward, in addition to any other individual acting on behalf of the child as guardian or in loco parentis. One individual may serve as advocate for more than one child. The advocate shall be an individual, who has the background and experience to act in, and agrees to act in, the best interests of the child for the duration of the child's participation in the research, and who is not associated in any way (except in the role as advocate or member of the IRB) with the research, the investigator(s), or the guardian organization.

ADDENDUM: 46 FR 8392

RESEARCH ACTIVITIES WHICH MAY BE REVIEWED THROUGH EXPEDITED REVIEW PROCEDURES

Research activities involving no more than minimal risk, and in which the only involvement of human subjects will be in one or more of the following categories (carried out through standard methods) may be reviewed by the

Institutional Review Board through the expedited review procedure, authorized in §46.110 of 45 CFR Part 46.

1. Collection of: hair and nail clippings, in a nondisfiguring manner; deciduous teeth, and permanent teeth if patient care indicates a need for extraction.
2. Collection of excreta and external secretions, including sweat, uncannulated saliva, placenta removed at delivery, and amniotic fluid at the time of rupture of the membrane prior to or during labor.
3. Recording of data from subjects 18 years of age or older, using noninvasive procedures routinely employed in clinical practice. This includes the use of physical sensors that are applied either to the surface of the body or at a distance, and do not involve input of matter or significant amounts of energy into the subject, or an invasion of the subject's privacy. It also includes such procedures as weighing, testing sensory acuity, electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, diagnostic echography, and electroretinography. It does not include exposure to electromagnetic radiation outside the visible range (for example, x-rays, microwaves).
4. Collection of blood samples by venipuncture, in amounts not exceeding 450 milliliters in an eight-week period, and no more often than two times per week, from subjects 18 years of age or older, and who are in good health and not pregnant.
5. Collection of both supra- and sub-gingival dental plaque and calculus, provided the procedure is not more invasive than routine prophylactic sealing of the teeth, and the process is accomplished in accordance with accepted prophylactic techniques.
6. Voice recordings made for research purposes, such as investigations of speech defects.
7. Moderate exercise by healthy volunteers.
8. The study of existing data, documents, records, pathological specimens, or diagnostic specimens.
9. Research on individual or group behavior or characteristics of individuals, such as studies of perception, cognition, game theory, or test development, where the investigator does not manipulate subjects' behavior, and the research will not involve stress to subjects.
10. Research on drugs or devices, for which an investigational new drug exemption or an investigational device exemption is not required.

[SOURCE: 46 FR 8392; January 26, 1981.]