

Moving Through IRB Basics

Glenn C. Graber
Professor Emeritus of Philosophy
Chair, Institutional Review Board

Code of Federal Regulations
TITLE 45
PUBLIC WELFARE
Department of Health and Human Services
PART 46
PROTECTION OF HUMAN SUBJECTS

Revised January 15, 2009
Effective July 14, 2009

<http://www.hhs.gov/ohrp/policy/ohrpreulations.pdf>

University of Tennessee Knoxville
Institutional Review Board
Guide for Faculty, Staff, and Students
Revised October 7, 2012

IRB Administration
Office of Research
1534 White Avenue
University of Tennessee, Knoxville
(865) 974-3466

<http://research.utk.edu/humansubjects/>

Definition of a Human Subject

- *Human subject* means a **living** individual about whom an investigator conducting research obtains:
 - data through intervention or interaction with the individual, or
 - identifiable private information. <45 CFR 46 102(f)>
- “Secondary” Subjects – info obtained indirectly

Definition of Research

- A systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge.
<45 CFR 46.102(d)>
- Activities which meet the definition whether or not they are conducted under a program which is considered research for other purposes; for example, demonstration and service programs may include research activities.

Institutional Review Board

Decentralization

“Each institution receiving federal support for research on human subjects is required to create an institutional review board [IRB]. All proposed clinical research, regardless of the source of support, should be approved by the local IRB to assure that the research plans are reasonable and that research subjects are adequately protected.” <45 CFR 46 103>

Reason for Decentralization

- Education within the institution about research standards
- Application of general standards to specifics of protocol and values and attitudes of local population

IRB Membership

- At least five members
 - **UTK IRB has 20 members**
- At least one non-scientist
- At least one scientist
- At least one “community” member
- Diverse in race, gender, cultural background

Prior Review

- No data can be gathered until the protocol has been approved.
- Approval period cannot exceed one year
- Adverse events must be reported and remediation plans approved
- Significant changes in the protocol must be approved before implementation

Review Criteria

IRB Review CHECKLIST

- 1) **Risks to subjects are minimized.**
 - **This is a key responsibility of the Departmental Review Committee**
 - **Based on your knowledge of the research practices and techniques of your discipline, is there some other way of getting this knowledge with less risk to participants?**

IRB Review CHECKLIST

- 2) Risks to subjects are reasonable in relation to anticipated benefits, if any
 - **Assessing risk, benefit, and comparing them are all matters of judgment.**
- 3) Selection of subjects is equitable.

IRB Review CHECKLIST

- 4) Informed consent will be sought from each prospective subject or the subject's legally authorized representative.
- 5) Informed consent will be appropriately documented.
 - **More about this to come.**

IRB Review CHECKLIST

- 6) Where appropriate, the research plan makes adequate provision for monitoring the data collected to ensure the safety of subjects
- 7) *Where appropriate*, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data.

IRB Review CHECKLIST

- b) *Where 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

Elements of Informed Consent

CONSENT: Basic elements

- a statement that the study involves research
- the purposes of the research
- the duration of the subject's participation
- procedures to be followed

CONSENT: Basic elements

- identification of experimental procedures
 - . It is important to distinguish these from activities that are NOT research
- risks or discomforts to the subject
- any benefits to the subject or to others
 - . incentives \neq benefits
- appropriate alternative procedures or courses of treatment

CONSENT: Basic elements

- confidentiality protections
- compensation or medical treatments if injury occurs?
 - . Only necessary in cases where injury is possible
- whom to contact for answers to pertinent questions
- whom to contact in the event of a research-related injury

CONSENT: Basic elements

- a statement that participation is voluntary
- statement that refusal to participate will involve no penalty or loss of benefits
 - Appropriate only in settings where penalty or loss of benefits is a possibility
- subject may discontinue participation at any time without penalty

CONSENT: Additional elements – if needed

- possibility of currently unforeseeable risks
- circumstances for termination by the investigator
- costs to the subject
 - If their insurance will be charged something, that should be explained too.

CONSENT: Additional elements – if needed

- consequences of subject's decision to withdraw
- procedures for orderly termination of participation
- statement that significant new findings will be provided
- approximate number of subjects

CONSENT: Additional elements

- Consent forms must **NOT** include any exculpatory language through which the subject or 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

Consent Waiver <§46.116(d)>

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

(1) the research involves no more than minimal risk

Consent Waiver (*cont'd*)

(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

(4) *whenever appropriate*, the subjects will be provided with additional pertinent information after participation.

Waiver of documentation

(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.

Waiver of documentation

(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**:

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.

Waiver of documentation

- 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. <45 CFR 46.117>

Types of Review

Types of IRB Review

- Exempt Study Review
 - . DRC primarily responsible
 - . IRB review within three working days after reaching IRB office
- Expedited Review (Administrative Review)
 - . Responsibility delegated to 1 or 2 reviewers
 - . Review within about a week
- Full Board Review
 - . 3 primary reviewers presents to Board
 - . Meets monthly

FORM A
Certification for Exemption from IRB Review for Research Involving Human Subjects

A. PRINCIPAL INVESTIGATOR(s) and/or CO-PI(s) (For student projects, list both the student and the advisor.): _____

B. DEPARTMENT: _____

C. COMPLETE MAILING ADDRESS AND PHONE NUMBER OF PI(s) and CO-PI(s): _____

D. TITLE OF PROJECT: _____

E. EXTERNAL FUNDING AGENCY AND ID NUMBER (if applicable): _____

F. GRANT SUBMISSION DEADLINE (if applicable): _____

G. STARTING DATE (NO RESEARCH MAY BE INITIATED UNTIL CERTIFICATION IS GRANTED): _____

H. ESTIMATED COMPLETION DATE (Include all aspects of research and final write-up): _____

I. RESEARCH PROJECT

1. Objectives of Project (Use additional page, if needed): _____
2. Subjects (Use additional page, if needed): _____
3. Methods or Procedures (Use additional page, if needed): _____
4. CATEGORY(S) FOR EXEMPT RESEARCH PER 45 CFR 46 (See instructions for categories): _____

J. CERTIFICATION: The research described herein is in compliance with 45 CFR 46.101(b) and presents subjects with no more than minimal risk as defined by applicable regulations.

Principal Investigator: _____ Name _____ Signature _____ Date _____

Student Advisor: _____ Name _____ Signature _____ Date _____

Department Review Committee Chair: _____ Name _____ Signature _____ Date _____

APPROVED:
Department Head: _____ Name _____ Signature _____ Date _____

COPIES OF THIS COMPLETED FORM MUST BE SENT TO COMPLIANCE OFFICE IMMEDIATELY UPON COMPLETION.

Rev. 01/2005

Categories of Exempt Research (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.

Categories of Exempt Research (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 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.

NOTE:

An exemption cannot be used when children are involved for research involving survey or interview procedures or observations of public behavior,

except for *research involving observation of public behavior when the investigator(s) do not participate in the activities being observed.*

[45 CFR 46.401(b)]

Categories of Exempt Research (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 [2 above], **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.

Categories of Exempt Research (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.

Categories of Exempt Research (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.

Categories of Exempt Research (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.

Parts of a “Form B”

- I. Identification of Project
- II. Project Objectives
- III. Description and Source of Research Participants
- IV. Methods and Procedures
- V. Specific Risks and Protection Measures
- VI. Benefits
- VII. Methods for Obtaining “Informed Consent” from Participants
- VIII. Qualifications of the Investigators
- IX. Facilities and Equipment to be Used in Research
- X. Responsibility of the Principal Investigator

Categories of Expedited Review 1

- (a) Research on drugs for which an investigational new drug application (21 CFR Part 312) is not required.
 - (Note: Research on marketed drugs that significantly increases the risks or decreases the acceptability of the risks associated with the use of the product is not eligible for expedited review.)
- (b) Research on medical devices for which
 - (i) an investigational device exemption application (21 CFR Part 812) is not required; **or**
 - (ii) the medical device is cleared/approved for marketing and the medical device is being used in accordance with its cleared/approved labeling.

Categories of Expedited Review 2

Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture as follows:

- (a) from healthy, nonpregnant adults who weigh at least 110 pounds. For these subjects, the amounts drawn may not exceed 550 ml in an 8 week period and collection may not occur more frequently than 2 times per week; or
- (b) from other adults and children, considering the age, weight, and health of the subjects, the collection procedure, the amount of blood to be collected, and the frequency with which it will be collected. For these subjects, the amount drawn may not exceed the lesser of 50 ml or 3 ml per kg in an 8 week period and collection may not occur more frequently than 2 times per week.

Categories of Expedited Review 3

- Prospective collection of biological specimens for research purposes by noninvasive means.
 - Examples: (a) hair and nail clippings in a nondisfiguring manner; (b) deciduous teeth at time of exfoliation or if routine patient care indicates a need for extraction; (c) permanent teeth if routine patient care indicates a need for extraction; (d) excreta and external secretions (including sweat); (e) uncannulated saliva collected either in an unstimulated fashion or stimulated by chewing gumbase or wax or by applying a dilute citric solution to the tongue; (f) placenta removed at delivery; (g) amniotic fluid obtained at the time of rupture of the membrane prior to or during labor; (h) supra- and subgingival dental plaque and calculus, provided the collection procedure is not more invasive than routine prophylactic scaling of the teeth and the process is accomplished in accordance with accepted prophylactic techniques; (i) mucosal and skin cells collected by buccal scraping or swab, skin swab, or mouth washings; (j) sputum collected after saline mist nebulization.

Categories of Expedited Review 4

- Collection of data through noninvasive procedures (not involving general anesthesia or sedation) routinely employed in clinical practice, excluding procedures involving x-rays or microwaves. Where medical devices are employed, they must be cleared/approved for marketing. (Studies intended to evaluate the safety and effectiveness of the medical device are not generally eligible for expedited review, including studies of cleared medical devices for new indications.)
 - Examples: (a) physical sensors that are applied either to the surface of the body or at a distance and do not involve input of significant amounts of energy into the subject or an invasion of the subject's privacy; (b) weighing or testing sensory acuity; (c) magnetic resonance imaging; (d) electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, doppler blood flow, and echocardiography; (e) moderate exercise, muscular strength testing, body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual.

Categories of Expedited Review 5

- Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for nonresearch purposes (such as medical treatment or diagnosis).
 - (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(4). This listing refers only to research that is not exempt.)

Categories of Expedited Review 6

- Collection of data from voice, video, digital, or image recordings made for research purposes.

Categories of Expedited Review 7

- Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.
 - (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(2) and (b)(3). This listing refers only to research that is not exempt.)

Categories of Expedited Review 8

- Continuing review of research previously approved by the convened IRB as follows:
 - (a) where (i) the research is permanently closed to the enrollment of new subjects; (ii) all subjects have completed all research-related interventions; and (iii) the research remains active only for long-term follow-up of subjects; **or**
 - (b) where no subjects have been enrolled and no additional risks have been identified; **or**
 - (c) where the remaining research activities are limited to data analysis.

Categories of Expedited Review 9

- Continuing review of research, not conducted under an investigational new drug application or investigational device exemption where categories two (2) through eight (8) do not apply but the IRB has determined and documented at a convened meeting that the research involves no greater than minimal risk and no additional risks have been identified.