Levels of IRB Review

The UTHSC College of Medicine Chattanooga IRB new project applications will ask you which level of IRB review you are requesting, **Full Board** review, **Expedited** review, **Exempt.** Form J will help determine if a project qualifies as **Not Human Subjects Research (NHSR)** determination.

The level of review reflects the level of risk to the subject and other stipulations set by federal regulations. "Minimal risk" is defined by the federal regulations:

> **Minimal risk** is the probability and magnitude of harm or discomfort anticipated in the research are not greater than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests (45.CFR.46.102(j)).

Greater than minimal risk studies require review by the Full Board, while minimal risk studies *may* be eligible for Expedited or Exempt review, or a NHSR determination.

Full Board Review

These types of studies are greater than minimal risk and require review by the full convened IRB. The UTHSC IRB meeting and submission schedule is available at https://www.uthsc.edu/comc/research/review-board.php

Examples of studies and research interventions/interactions that require Full Board review:

- Behavioral studies involving risky interventions, observations of illegal behavior, or deception
- Blood draw ○ Healthy nonpregnant adults weighing at least 110 lbs – the amount to be collected exceeds 550 ml in an 8-week period and the collection is more than 2x/week
    - Other adults and children considering age, weight, and health, – the amount to be collected is greater of 50 ml or 3 ml per kg in an 8-week period and collection is more than 2x/week
- CT Scan
- DXA scan
- Disclosure of information that could require mandatory legal reporting (e.g. child/elder abuse, etc)
- Electromyography (EMG) (intramuscular)
- Investigational drug administration
- Investigational device testing
- Nasal swabs that go beyond the nares
- Prisoners – if a study will include interactions/interventions that pose more than minimal risk to the subjects who are prisoners
  Prisoners = individuals sentenced to an institution under a criminal or civil statue; individuals detained in other facilities by virtue of statutes or commitment procedures which provide alternatives to criminal prosecution or incarceration in a penal institution; an individual detained pending arraignment, trial, or sentencing; etc.
- Randomized treatment studies

- Rectal swabs that go beyond the rectum
- Some kinds of genetic testing
- Vaginal swabs that go beyond the cervical os
- When privacy and confidentiality protections may be questionable: Disclosure of illegal activities, sexual attitudes, genetics, religious beliefs, mental health that could place subjects at risk of criminal or civil liability, could be damaging to the subject's financial standing, employability, insurability, reputation, or could be stigmatizing ○ Depression and mental health disorders
    - Sexual abuse
    - Violent crimes or other criminal behavior ○ Opinions about employers
- X-rays (any type) taken for research purposes

Expedited Review

These types of studies only involve minimal risk to subjects and fit into one or more of the specific Expedited review categories. This type of research does not require review by the full convened IRB. The IRB review is conducted by the IRB Chair or one or more experienced reviewers designated from among the members of the IRB.

Category 1: Approved drug or device being used for its approved indication

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.

Note: The drug or device must be approved and used exactly according to its labeling. All study procedures other than use of the drug or device must themselves be of minimal risk for the study to qualify for expedited review.

Category 2: Blood Collection

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

a. (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.

Category 3: Noninvasive specimen collection

Prospective collection of biological specimens for research purposes by noninvasive means.

Examples:

a. Hair and nail clippings in a non-disfiguring 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.

Additional Examples:

a. Nasal swabs that do not go beyond the nares
b. Rectal swabs that do not go beyond the rectum
c. Vaginal swabs that do not go beyond the cervical os

Category 4: Non-invasive procedures

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. Body composition assessment (not DXA)
b. Detection of naturally occurring radioactivity
c. Diagnostic infrared imaging
d. Doppler blood flow
e. Echocardiography
f. Electrocardiography
g. Electroencephalography
h. Electromyography (EMG) (electrodes only)

i. Electroretinography
j. Flexibility testing where appropriate given the age, weight, and health of the individual
k. Magnetic resonance imaging (MRI)
l. Moderate exercise
m. Muscular strength testing
n. 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
o. Thermography
p. Ultrasound
q. Weighing or testing sensory acuity

Additional Examples:

a. fMRI
b. Force plate
c. Tendon tapping
d. Vision testing/evaluation
e. Vital signs (blood pressure, heart rate, respirations, etc.)

Category 5: Use of data, records, or specimens collected for non-research purposes Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for non-research purposes (such as medical treatment or diagnosis).

Examples:

a. Retrospective or prospective chart review
b. Analysis of specimens that contain any of the 16 direct HIPAA identifiers (e.g., name, MRN, etc.) **Data is not de-identified when MRN will be collected.**

Category 6: Collection of data from voice, video, digital, or image recordings made for research purposes

Example: Using video recordings to examine communication styles between faculty and students

Category 7: Behavioral research

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.

Example: Survey research

Exemption Categories

(1) Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

(2) Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

1. (i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.
2. (ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or
3. (iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

(3) (i) Research involving benign behavioral interventions in conjunction with the collection of information from an adult subject through verbal or written responses (including data entry) or audiovisual recording if the subject prospectively agrees to the intervention and information collection and at least one of the following criteria is met:
(A) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;

(B) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or

(C) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).
(ii) For the purpose of this provision, benign behavioral interventions are brief in duration, harmless, painless, not physically invasive, not likely to have a significant adverse lasting impact on the subjects, and the investigator has no reason to think the subjects will find the interventions offensive or embarrassing. Provided all such criteria are met, examples of such benign behavioral interventions would include having the subjects play an online game, having them solve puzzles under various noise conditions, or having them decide how to allocate a nominal amount of received cash between themselves and someone else.

(iii) If the research involves deceiving the subjects regarding the nature or purposes of the research, this exemption is not applicable unless the subject authorizes the deception through a prospective agreement to participate in research in circumstances in which the subject is informed that he or she will be unaware of or misled regarding the nature or purposes of the research.

(4) Secondary research for which consent is not required: Secondary research uses of identifiable private information or identifiable biospecimens, if at least one of the following criteria is met:

1. (i) The identifiable private information or identifiable biospecimens are publicly available;
2. (ii) Information, which may include information about biospecimens, is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained directly or through identifiers linked to the subjects, the investigator does not contact the subjects, and the investigator will not re-identify subjects; MRN CANNOT BE COLLECTED AND MAINTAINED
3. (iii) The research involves only information collection and analysis involving the investigator's use of identifiable health information when that use is regulated under 45 CFR parts 160 and 164, subparts A and E, for the purposes of "health care operations" or "research" as those terms are defined at 45 CFR 164.501 or for "public health activities and purposes" as described under 45 CFR 164.512(b); or
4. (iv) The research is conducted by, or on behalf of, a Federal department or agency using government-generated or government-collected information obtained for nonresearch activities, if the research generates identifiable private information that is or will be maintained on information technology that is subject to and in compliance with section 208(b) of the E-Government Act of 2002, 44 U.S.C. 3501 note, if all of the identifiable private information collected, used, or generated as part of the activity will be maintained in systems of records subject to the Privacy Act of 1974, 5 U.S.C. 552a, and, if applicable, the information used in the research was collected subject to the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 et seq.

(5) Research and demonstration projects that are conducted or supported by a Federal department or agency, or otherwise subject to the approval of department or agency heads (or the approval of the heads of bureaus or other subordinate agencies that have been delegated authority to conduct the research and demonstration projects), and that are designed to study, evaluate, improve, or otherwise examine public benefit or service programs, including procedures for obtaining benefits or services under those programs, possible changes in or alternatives to those programs or procedures, or
possible changes in methods or levels of payment for benefits or services under those programs. Such projects include, but are not limited to, internal studies by Federal employees, and studies under contracts or consulting arrangements, cooperative agreements, or grants. Exempt projects also include waivers of otherwise mandatory requirements using authorities such as sections 1115 and 1115A of the Social Security Act, as amended.

1. (i) Each Federal department or agency conducting or supporting the research and demonstration projects must establish, on a publicly accessible Federal Web site or in such other manner as the department or agency head may determine, a list of the research and demonstration projects that the Federal department or agency conducts or supports under this provision. The research or demonstration project must be published on this list prior to commencing the research involving human subjects.

(6) Taste and food quality evaluation and consumer acceptance studies:

1. (i) If wholesome foods without additives are consumed, or
2. (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.

To meet the requirement of brief in duration, the benign behavioral intervention should last a few minutes to a few hours. While it does not have to occur in a single session, the entire time for the intervention ***should occur on a single day*** *and not exceed a few hours in its entirety.*

Exception to Exemptions: Certain kinds of research with human subject are not eligible for exempt determinations. These include:

Prisoners: research involving prisoners as human subjects is *not* eligible for exemption except for research aimed at involving a broader subject population that only incidentally includes prisoners.

FDA-regulated Research: research using a drug, device or biologic, approved for marketing or not, outlined under 21 CFR 312 (drugs), 21 CFR 812 (devices), and 21 CFR 600 (biologics). FDA regulations for informed consent (21 CFR 50) and Institutional Review Boards (21 CFR 56) also apply.

Minors (Children): Most of the exemption categories can apply to research with minors, except for secondary research involving identifiable data or specimens, surveys, and interviews. Also, research involving educational tests or observations of public behavior can only be exempt when there is no interaction with the researcher.

Contact the IRB office at 423-778-3818 if you are unsure about which level of review is needed.

Non-Human Subjects Research/QI (NHSR)

Under UTHSC College of Medicine Chattanooga IRB policy, determination of whether a study qualifies for NHSR or Exempt status must be made by the Chair or other senior member of the IRB via a new project submission in IRBNet.

NHSR projects do not meet the federal regulatory definitions of "research" and/or "human subject".

DHHS regulations at 45 CFR 46.101 identify several different minimal risk research activities in which the only involvement of human subjects will be in one or more categories that are Exempt from federal policy for the protection of human subjects.

These determinations are made through submission and review of the *UTHSC College of Medicine IRB Form J for* NHSR via IRBNet the IRB electronic system. For Exemption request, submission and review of the UTHSC College of Medicine Chattanooga Initial Approval Form.

Once a study has been determined to qualify for NHSR or Exempt status, no further oversight by the IRB is necessary unless you wish to make revisions to the project. A *Form 1C: Change Request & Amendments* form must then be submitted in order for the IRB to determine whether the project remains eligible for NHSR or exempt status, or needs a higher level of review, based on the requested revisions to the project. Further, once the project has been completed, a *Form 1F: Study Closure* form must be submitted for IRB review.