Background

Unanticipated problems involving risks to subjects or others must be promptly reported to the Office for Human Research Protections (OHRP) by the IRB. The majority of adverse events occurring in the context of research are expected in light of the known toxicities and side effects of the research procedures or are due to the natural history of subjects’ underlying diseases or conditions. Therefore, the majority of adverse events do not represent unanticipated problems which are reportable by the PI to the IRB and subsequently by the IRB to OHRP. The Federal Regulations for the protection of human subjects contain five specific requirements relevant to the review and reporting of adverse events and unanticipated problems. They require OHSU to:

- Have written procedures for prompt reporting to the IRB and other appropriate officials of unanticipated problems involving risk to subjects
- Report all unanticipated problems to OHRP.
- Provide adequate and appropriate provisions in proposed research plans to monitor data for subject safety
- Conduct substantive continuing review at intervals appropriate to the degree of risk
- Suspend or terminate research that has been associated with unexpected serious harm to subjects

Scope

This policy defines unanticipated problems and adverse events and establishes the reporting process and timeline.

Authority

45 CFR 46.103(b)(5) and 21 CFR 56.108(b) requires that Institutions engaged in human subjects research conducted or supported by HHS must have written procedures for ensuring prompt reporting to the IRB, appropriate institutional officials, and any supporting department or agency head of any unanticipated problem involving risks to subjects or others.

OHRP Guidance on Reviewing and Reporting Unanticipated Problems Involving Risks to Subjects or Others and Adverse Events. [http://www.hhs.gov/ohrp/policy/AdvEvntGuid.htm](http://www.hhs.gov/ohrp/policy/AdvEvntGuid.htm)


I. Policy

A. PIs are required to promptly submit written reports of events to the IRB that represent unanticipated problems involving risks to participants and others.

B. Meaningful review and management of adverse events and unanticipated problems is dependent on adequate and appropriate safety monitoring.

II. Procedure

A. Responsibilities

1. Principal Investigators – It is the PI’s responsibility to analyze and review all adverse events (AEs) and Unanticipated Problem (UPs) that occur in studies on which he/she is the PI, determine if an AE is a UP, determine the appropriate action to be taken in response to AEs and UPs, and appropriately report UPs to the IRB. In the case of an
On Protocol event in a Non-OHSU subject, the determination of whether the AE represents a UP lies with the central monitor.

2. **Institutional Review Board** – It is the IRB’s responsibility to review the reports, determine if modifications are needed in response to the UP, and to report unanticipated problems to the Federalwide Assurance (FWA) signatory official, any supporting department or agency head, and OHRP for OHSU internal events, if not delegated to a central monitor.

3. **Central Monitor** - It is the Central Monitor’s responsibility to analyze and review applicable On Protocol events for Non-OHSU subjects and Off Protocol events using the same drug or agent, determine if the AEs are UPs, and report the UPs to the PI for subsequent reporting to the PIs IRB. If OHSU is serving as a coordinating center, then the PI of the coordinating center is responsible for this determination via an approved monitoring plan.

B. **Reportable Adverse Event Analysis**
   1. In order for the PI (or the Central Monitor) to determine whether a particular AE is “unanticipated” and also considered reportable as a UP, the following should be taken into account:
      - The description of known or foreseeable adverse events and risks in the IRB-approved research protocol, any applicable investigator brochure, the current IRB-approved consent form, and other relevant sources of information.
      - Any underlying disease or conditions of the subject experiencing the adverse event.
      - A careful assessment of whether the adverse event is related or possibly related to the subject’s participation in the study.

   2. The UP analysis charts and/or the UP Decision Tree should be used to help make this determination. The charts provide guidance on determining when an event is expected and related as well as when to report events that occur outside of OHSU or on different protocols.

   3. Any event that is rare in the absence of drug exposure, such as agranulocytosis, hepatic necrosis, or Stevens-Johnson syndrome is always an unanticipated problem.

C. **When to Report**
   1. All UPs, including AEs that meet the definition of a UP as determined by the PI or the Central Monitor, unless otherwise determined by the reviewing IRB, must be reported by the PI to the IRB as soon as possible, and within the following time frames:
      - **Deaths and potentially life-threatening events** must be reported within seven (7) calendar days after the PI learns of the event. If any of these SAEs requires a change (as determined by the PI or the IRB) to the protocol or consent form, the PI must make those changes promptly and submit the revised documents to the OHSU IRB.
      - **All other UPs** must be reported within fifteen (15) calendar days. If the event requires changes (as determined by the PI or the IRB) to the protocol or consent form, the PI must make those changes promptly and submit the revised documents to the IRB.

   2. A brief summary of UPs as well as a brief summary of all adverse events must be submitted with the continuing review using the IRB template “Annual Event Summary” Form located on the IRB website.

   3. The IRB reserves the right to request a report or additional information at any time.

D. **How to Report**
   1. Reports are made through the eIRB, which will ask for the following information.
   2. Reports of UPs, including AEs that meet the definition of an UP, must include the following information:
      - Study Information: Title, PI, IRB#, Sponsor/award #, IND/IDE#
      - Number of subjects enrolled to date and currently actively involved in research procedures.
      - Date of UP, Date notified of UP
Classification of the Experience Type: On protocol UP for OHSU Subjects, On protocol UP for Non-OHSU subjects, Off protocol UP (using same drug or agent), or Other Unanticipated Problem

- Participant ID, if applicable
- Description of event
- Agent involved if applicable (for example, drug, device, placebo)
- Relationship of the agent or research procedures to the UP.
- Basis for UP determination: Analysis as to why the event represents a "problem" for the study and why it is "unanticipated". For instances of increased frequency or severity, it must state how the frequency or severity diverges from the expected.
- Response Plan. Description of proposed actions, including modifications, to be taken by investigators in response to the UP

E. IRB Review of Submitted Unanticipated Problems

1. The IRB chairperson and/or designee will review the UP report and the response plan, including any proposed modifications, and triage it appropriately.
   - Proposed modifications which represent minor changes may be triaged for expedited review.
   - In the case of proposed modifications which represent more than a minor change or are otherwise not approvable under expedited review procedures, review will be referred to the full board for review and further action.
   - In all cases, the IRB Chairs reserve the right to refer any report or proposal to the full board.

2. If the response plan indicates that no modifications are proposed and the reviewer(s) agree, the report will be approved and no further action is needed.

3. If the reviewers believe that modifications are needed, either because no modifications were proposed in the response plan or because insufficient or incorrect modifications were proposed, the IRB chairperson will request in writing that the PI discuss this with the central monitor, if applicable, and submit a response or the necessary modification(s). In situations where there is not a central monitor, the PI will be required to respond.

4. All reports of UPs will continue through appropriate IRB review procedures until the reports and any applicable modifications are approved or disapproved. As with any disapproval, the PI may appeal the decision.

5. The IRB has authority to require submission of more detailed contextual information by the PI, sponsor, and study coordinating center or DSMB/DMC about any adverse event or unanticipated problem.

III. Definitions

A. Adverse Event (AE) – Any untoward or undesirable, although not necessarily unexpected, event experienced by a human subject that may be a result of:
   - The interventions and interactions use in the research
   - The collection of identifiable private information in the research
   - An underlying disease, disorder, or condition of the subject; and/or
   - Other circumstances unrelated to the research or any underlying disease, disorder, or condition of the subject.

B. Anticipated – previously known or expected to result.

C. Central Monitor – Data Safety Monitoring Board (DSMB), Data Monitoring Committee (DMC), a coordinating or statistical center, the research sponsor or the PI (in certain cases).

D. Coordinating Center - A Coordinating Center is responsible for overall data management, monitoring and communication among all sites, and general oversight of conduct of the project.

E. Data Safety Monitoring Board (DSMB) or Committee (DMC) – An independent formal committee that is established specifically to monitor data throughout the life of a study to determine if it is appropriate, from both the scientific and ethical standpoint, to continue the study as planned. DSMBs/DSMCs are typically made up of individuals who have
expertise in the field, experience in the conduct of clinical trials, and/or statistical
knowledge, and who do not have any serious conflicts of interest, such as financial
interests that could be substantially affected by the outcome of the trial, strong views on
the relative merits of the interventions under study, or relationship with the sponsor or
those in trial leadership positions that could be considered reasonably likely to affect
their objectivity.

F. **Data Safety Monitoring Plan (DSMP)** – A plan which describes how the investigator
plans to oversee the research participants’ safety and welfare and how unanticipated
problems and adverse events will be detected, characterized and reported. The
intensity and frequency of monitoring should fit the expected risk level, complexity and
size of the study.

G. **Off Protocol AE** – AE’s that occur to an OHSU or a non-OHSU subject in one protocol
that may influence the risks to subjects in another OHSU protocol (e.g., studies of the
same drug/device but in a different protocol at OHSU or another site).

H. **On Protocol AE – Non-OHSU subjects** – AE’s that are external to OHSU and occur to
subjects in a multi-center study in which OHSU participates (e.g., multi-center NIH
studies, industry-sponsored drug or device studies, etc.) but over which the OHSU IRB
has no jurisdiction. The PIs are usually notified by the sponsors or a central monitor of
the AEs.

I. **On Protocol AE – OHSU subjects** – AE’s that occur to a subject in a study, both single
site and multi-center, which has been reviewed and approved by an OHSU IRB. PIs
usually become aware of these AE’s directly from the subject, or a co-investigator or the
subject’s provider.

J. **Reportable Adverse Event** – AE’s which qualify as unanticipated problems that must be
reported by the PI to the IRB and by the IRB to the Institutional Official and to OHRP are
categorized as follows:

*Reportable Categories:*

1. On Protocol Serious Adverse Events (SAEs) that are unexpected and related
or possibly related to participation in the research.

2. On Protocol SAEs or AEs that are expected in some subjects, are related or
possibly related, but are determined to be occurring at a significantly higher
frequency or severity than expected.

3. On or Off Protocol Unexpected SAEs or AEs that are related or possibly
related, regardless of severity, that may alter the IRB’s analysis of the risk
versus potential benefit of the research and, as a result, warrant
consideration of substantive changes in the research protocol or informed
consent process/document.

4. Other events that are On or Off Protocol and unexpected that may place
subjects or others at a greater risk of harm or discomfort than was previously
known or recognized. Harm to a subject need not have occurred.

K. **Serious Adverse Event** – Any AE that:

- Is fatal
- Is life-threatening
- Is persistent or significantly disabling or incapacitating
- Results in inpatient hospitalization or prolongation of hospitalization
- Results in psychological or emotional harm requiring treatment
- Creates a persistent or significant disability
- Causes a congenital anomaly or birth defect and/or
- Results in a significant medical incident (considered to be a serious
study related event because, based upon appropriate medical judgment,
it may jeopardize the subject and may require medical or surgical
intervention to prevent one of the outcomes listed in this definition.)

L. **Unanticipated** – not previously known or expected (including increases in severity or
frequency).

M. **Unanticipated Problems** – Events that are not expected given the nature of the research
procedures and the subject population being studied and suggest that the research
places subjects or others at a greater risk of harm or discomfort related to the research
than was previously known or recognized. Harm to a subject need not occur for an event to be an unanticipated problem.