Reporting of Unexpected Adverse or Unanticipated Events and Other Animal Welfare Concerns

What is an unexpected adverse event?

Unexpected adverse events (UAE) are undesirable effects that result from, or occur during or following, a research procedure or teaching activity (e.g., use of a medication, medical device, pesticide, vaccine or other biological product, surgical procedure, handling, etc.). These undesirable effects negatively impact animal welfare and were not expected or anticipated during the planning of the research. They may or may not be caused by a product or device.

Who should report UAEs?

UAEs should be reported by the principal investigator for the protocol that covers the affected animal(s). Investigators should promptly report UAEs to the IACUC so that the IACUC can help assure that the problems are addressed in a timely manner and that potential pain and distress for the animal(s) have been addressed.

What information needs to be reported?

The report should include the nature of the event, how the event and animal welfare were monitored or addressed, and what immediate and long-term steps are being taken or considered to prevent reoccurrence of the event.

The Adverse Event/Unanticipated Problem Form, available on the IACUC Forms page of the website, has been developed to assist investigators in reporting unanticipated problems.

Why should UAEs be reported?

The IACUC is responsible for monitoring the animal research and teaching activities described in the IACUC-approved protocol. Reporting UAEs assists the IACUC in this role. It also allows principal investigators, animal care staff, and the attending veterinarian to evaluate the cause of UAEs and consider changes in the protocol or standard operating procedures to prevent reoccurrence. Reports of UAEs also provide documentation of animals experiencing unexpected pain or distress for proper reporting on ISU’s mandatory annual report to the USDA.

What are examples of UAEs that must be reported?

- Deaths of animals not described in the PRF or when a significant number die; e.g., the majority of the animals on the protocol becomes sick immediately after shipping due to weather conditions when they arrive; 9 out of 10 animals die immediately after shipping; an animal is found dead the day after surgery; significant loss of life due to a disease outbreak.
- Study-related complications not described in the PRF; e.g., an animal has an allergic reaction to a treatment; anesthetic approved for a protocol doesn’t adequately work; animals develop an infection following surgery.
More deaths or complications than described in the PRF; e.g., 10% of the animals die following surgery when a 5% mortality rate was expected and justified in the PRF; animals appear to be in more pain or distress from a procedure than expected.

How do I avoid making many reports for things that normally happen?

A report is not required if the IACUC is aware that an adverse event may occur and the event has happened as was described and approved in the Protocol Review Form (PRF). If an investigator expects certain complications to occur as a result of research or teaching procedures, based upon their experience, the literature or current knowledge, those complications should be identified and explained as a possible adverse event in the application for approval or subsequent modifications. For example, list potential mortalities from induced infection, trapping, expected death loss or surgery for new studies in the questions regarding resultant effect or adverse events in the PRF. If a proposed modification is expected to result in certain complications, those complications should be identified and explained in the question regarding adverse events in the modification section of the Continuing Review and/or Modification Form.

What are examples of events that should be reported in the annual continuing review form in the questions related to progress or problems of the study?

- **Deaths of animals that would have occurred regardless of the research;** e.g., animals reaching the natural end of life.
- **Delays in conduct of the research;** e.g., funding was delayed so the research could not be initiated.
- **Study complications described in the PRF occurred;** e.g., up to 5% animal mortality was expected from a disease and 3% died.
- **PRF deviations that do not impact the animals’ welfare;** e.g., 5 out of 20 study animals were inadvertently fed the wrong diet and had to be removed from the trial; several animals broke out with a disease not associated with the research study, preventing initiation of the research or requiring the purchase of more animals.

What are examples of events that do not need to be reported?

- **Injury or illness unrelated to study procedures that are being treated by the Attending Veterinarian, University Veterinarian, or Contract Veterinarian;** e.g., an animal is diagnosed with coccidia; an animal is treated for bloat.

Who is responsible for ensuring that animals are shipped safely and for reporting adverse events that occur during shipment of animals to or from ISU?

The Office of Laboratory Animal Welfare (OLAW), Department of Health and Human Services, guidance indicates that “OLAW expects all parties involved to apply due diligence in assuring that animals are shipped under appropriate conditions to prevent morbidity or mortality due to temperature extremes or other adverse events. When animals are shipped from an institution, that institution should consider and address all relevant factors to ensure safe transport of the animals. OLAW expects shipping institutions to report adverse events that occur to animals in transit. Receiving institutions should notify the shipping institution when animals are received in extremis or dead.” (PHS Policy on Human Care and Use of Laboratory Animals, Frequently Asked Questions, http://grants.nih.gov/grants/olaw/faqs.htm)
What if an adverse event occurs that negatively impacts animal welfare but is not related to research or teaching procedures?

Adverse events that occur which are not related to research, or teaching procedures that jeopardize the health and well-being of animals, should be reported to the IACUC. Generally, the individual responsible for oversight of a facility (e.g., facility director, faculty farm manager) should inform the IACUC of the adverse events, including the corrective actions implemented to help prevent further events. Examples of adverse events include:

- *Facility or equipment failure has, or may have, an impact on animal welfare*; e.g., an animal injured in a malfunctioning restraint chute; power outage resulting in lack of ventilation; animals have been terminally injured due to malfunctioning equipment.
- *Poor facility, husbandry, or care has, or may have, an impact on animal welfare*; e.g., animal burned by a heat lamp; animals develop sore feet caused by cage flooring.

How can other individuals report concerns?

Concerns about the care and use of animals at ISU may be reported to any of the following:

- **ISU Compliance and Ethics Hotline** through an online report or by calling 515-294-7119. Reports may be anonymously submitted.
- Institutional Official, Dr. Sarah Nusser, 4-1785, nusser@iastate.edu
- Interim Director, Office for Responsible Research, Kerry Agnitsch, 4-4271, kagnitsc@iastate.edu
- IACUC Chair, Dr. Steve Ensley, 4-1950, sensley@iastate.edu
- Attending Veterinarian, Dr. Mary Sauer, 4-0266, msauer@iastate.edu
- Any IACUC member. The names of current IACUC members may be obtained from the IACUC/IBC Administrator, 4-9581.

Any individual who, in good faith, reports an animal welfare concern will be protected against reprisals.

Any person who is concerned about animal use in a specific class or research project may contact the faculty member(s) or unit at whom/which the complaint is directed. If the concern is not addressed adequately, or if there is fear of retribution, a person is encouraged to report through one of the alternative routes listed above.

What is the IACUC process for review of UAEs, adverse events, and reports of animal concerns?

All UAEs, adverse events, and reports of animal concerns are forwarded to the IACUC for their information and are placed on the agenda for the monthly meeting following receipt. The IACUC Chairs, Attending Veterinarian, and Director of the Office for Responsible Research review the UAE or adverse event reports to determine if immediate review is needed. If IACUC members are satisfied that the UAE has been appropriately addressed, the report will be filed with no further action taken; the principal investigator (PI) will be notified of the committee’s decision. If IACUC members have concerns regarding the resolution to the UAE, the IACUC will initiate communications with the PI. The PI is welcome to attend the IACUC meeting at which the UAE will be reviewed.