

Policy: Sick Animal Response

Category: Post Approval Monitoring

Subject: Sick animal response in any areas in which animals are held and/or used for research, teaching or testing at Western University and affiliated institutions

Approving Authority: University Council on Animal Care

Responsible Office: Animal Care & Veterinary Services

Related Procedures: Procedures for Sick Animal Response

Effective Date: May 5, 2016

Previous Approval Dates: March 18, 2015; October 7, 2015

Revised:

Purpose

To establish a standardized and appropriate approach to handling sick animals at all sites under the authority of Western University's Animal Care and Use Program.

Rationale

ACVS Veterinarians are mandated by the Canadian Council on Animal Care (CCAC) via the *Agreement on the Administration of Agency Grants and Awards by Research Institutions*, Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) via the *Animals for Research Act*, University Council on Animal Care (UCAC) via Western University's policies and the Animal Care Committee (ACC) to apply their expertise in veterinary animal medicine in establishing and maintaining the animal health program associated with animal-based science within *Western's Research Community*. CCAC, having adopted Canadian Association for Laboratory Animal Medicine's (CALAM) *Standards of Veterinary Care (2007)*, expects these standards to be in place in order to receive and maintain our institution's *Certificate of GAP*. *Sick Animal Response (SAR)*, a stepwise framework in responding to animal health and welfare concerns, requires a consistent approach that aligns with regulatory standards by ensuring an appropriate response to sick animals by competent and accountable persons.

Scope

This policy applies to all animal-based science within *Western's Research Community*.

Policy

ACVS Veterinarians are ultimately responsible for conducting diagnoses and determining appropriate treatments for *sick animals*.

ACVS Veterinarians must have authority to treat, remove from a study, or euthanize any animal if deemed necessary based on the professional judgment of the veterinarian.¹

Sick animals must undergo a treatment regime commensurate with their condition as outlined by CALAM's *Standards of Veterinary Care (2007)*.

¹ See CALAM Standards of Veterinary Care (2007) P.5 <http://calam-acmal.org/pdfs/StandardsVetCare.pdf>

Diagnostic laboratory services must be available and used as determined by the ACVS Veterinarian.²

ACVS Veterinarians must make *reasonable effort* to discuss any animal health and welfare concerns with the Principal Investigator to determine the most appropriate course of action.

For *critical animals*, an ACVS Veterinarian must ensure immediate intervention by treating or euthanizing an animal based on his/her professional judgment.

ACVS Veterinarians may authorize *SAR Designates* to administer treatments and follow-up on clinical cases in a timely manner.

Animal Care (AC) Facility Supervisors and Principal Investigators, or their *designates*, must promptly notify ACVS Veterinarians on concerns regarding an animal's health, behaviour and/or well-being and provide updates on the status of animals undergoing veterinary treatment.

AC Facility Supervisors and/or Principal Investigators must directly involve an ACVS Veterinarian in the diagnosis, treatment planning and follow-up.

Principal Investigators, AC Facility Supervisors and their designates must ensure up-to-date emergency contact information is readily available within the animal room at all times.

Animal Care (AC) Facility Supervisors, Principal Investigators and *SAR Designates* must follow ACVS veterinary approved *SAR Algorithms* when intervening on behalf of an ACVS Veterinarian.

Individuals responsible for daily animal health observations must be competent in assessing the well-being of animals under their care.

Any animal ongoing non-critical health concerns that cannot be readily resolved through collaborative interactions between an ACVS Veterinarian, the Principal Investigator, and/or an Animal Care (AC) Facility Supervisor must be forwarded through the *Concerns Identification, Project Refinement and Corrective Response* process.

Sick animal identification, diagnosis, treatments and all associated *Animal Records* must be documented as per the *Animal Care and Use Records Policy* and made readily available for review by ACVS Veterinarians.

All adverse events to animals and associated interventions involving sick animals, as noted above, must be disclosed within the *Animal Use Protocol* at Annual Protocol Renewal and at an AUP's Full Renewal.

Principal Investigators, AC Facility Supervisors and/or their designate(s) must immediately inform an ACVS Veterinarian of all instances of *animal morbidity* and *animal mortality*; must record all *animal mortalities* and *morbidity* in distinct logs to be made available at all times to ACVS veterinarians, ACC members, and regulatory inspectors; and must submit these logs to the ACC monthly via the AC Facility Supervisor.

All bodies relating to *animal morbidity* and *mortality* must be held for post-mortem examination by an ACVS Veterinarian, unless directed otherwise by an ACVS veterinarian.

Definitions

- **Animal Care & Veterinary Services** – A department directly accountable to Western's Senior Administrator for providing specialized veterinary and other administrative services that support the animal care and use program within Western's Research Community, in consultation with the University Council on Animal

² CALAM Standards of Veterinary Care (2007). P. 9

Care, the Animal Care Committee, institutional senior administrators and officers, and animal-based scientists

- **Animal Care Committee (ACC)** – A subcommittee of the University Council on Animal Care; the institutional animal care committee “responsible for overseeing all aspects of animal care and use and for working with animal users, animal care personnel and the institutional administration”; responsible to ensure animal ethics and care for animal-based science and animal displays directly associated with Western’s Research Community is in accordance with all regulatory and institutional policies and guidelines
- **Animal Care (AC) Facility Supervisor** – A trained, competent individual responsible for the oversight of an area or facility that houses research animals who is accountable to the ACVS Director as regards animal health and welfare related matters
- **Animal Morbidity** –
 - **A. For Purposes of Veterinary Interventions & Post Mortems** – Any sick animal’s condition that is beyond the experimental parameters identified in the related AUP
 - **B. For Purposes of Morbidity Log Record-Keeping** – All sick animals
- **Animal Mortality** – Any animal that has died under any circumstance or condition, with the exception of one that has reached its experimental endpoint, as outlined within the related AUP. Includes animals found dead and morbid animals requiring early euthanasia
- **Animal Records** – Legibly written documentation located within the animal holding area as per facility Standard Operating Procedures (e.g. PI specific in-room animal binder) - in addition to and separate from *Cage Card* information - that chronologically and in real-time outlines all animal events, observations, actions and outcomes
 - *Animal ID* – unique identifier of individual animals
 - *Events* – all animal manipulations, treatments, injections, drugs administered, behavioural experiments, surgeries
 - *Observations* – as indicated in the approved AUP and abnormalities in health and behaviour not identified in the AUP
 - *Actions* – interventions to address abnormalities
 - *Outcomes* – results of interventions, euthanasia end points
- **Animal Use Protocol (AUP)** – The ACC’s mandatory animal ethics form that contains details of a AUP holder’s intended live vertebrate animal care and use, which must be reviewed and approved by the ACC in advance of animal-based science or public viewing of displayed animals
- **Canadian Association for Laboratory Animal Medicine (CALAM)** – A national organization for veterinarians whose vision is to be recognized and respected as leaders in laboratory animal welfare; committed to excellence in laboratory animal medicine and welfare for the global advancement of science, health and education
- **Canadian Council on Animal Care (CCAC)** – A not-for-profit organization, created in 1968 to oversee the ethical use and care of animals in science (research, teaching and testing) throughout Canada on behalf of Tri-Agency and the Canadian public
- **Certificate of GAP** - A CCAC Certificate of GAP – Good Animal Practice® is earned by institutions which:
 - participate fully in the CCAC Program
 - have been assessed by assessment panels composed of scientists, veterinarians and community representatives
 - have been found by the panel and by the CCAC Assessment and Certification Committee to have standards of experimental animal care and use which satisfy the CCAC’s guidelines and policy statements³

³ Canadian Council on Animal Care. Retrieved 03 February, 2016 from: http://www.ccac.ca/en/_/assessment/certification

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- **Concerns Identification, Project Refinement and Corrective Response Policy and Procedures** – A framework for Western’s Animal Care Committee to effectively and collegially assess concerns and then respond to incidents and non-compliance pertaining to animal-based science
 - **Critical Animal** – A *sick animal* having serious to severe health concerns, as determined by an ACVS Veterinarian, that requires immediate intervention in order to relieve unnecessary or unacceptable pain or suffering
 - **Designate** – An individual who is adequately trained and appropriately experienced with the animals under his/her care/oversight and who is authorized to act on behalf of his/her direct supervisor
 - **Designated Animals** – All other animals than those identified as *Directed Animals* whose initial diagnosis and treatment have been designated to *SAR Designates*, e.g. Animal Care Supervisors, PIs, and their staffs
 - Includes all species not listed as directed, e.g. rodents, birds and fish
 - Non-critical health concerns
 - Non-critical sick animal associated with experimental groups with no known history of increased morbidity
 - Non-critical animal not identified by an ACVS Veterinarian or the ACC to require his/her direct involvement
 - **Directed Animals** –
 - Species - Pigs, sheep, dogs, cats, non-human primates, and rabbits
 - Conditions as determined by the ACC or an ACVS Veterinarian
 - Any sick animal with critical (serious to severe) health concerns
 - Any sick animals associated with experimental groups experiencing increased morbidity
 - Any animal identified by an ACVS Veterinarian or the ACC to require his/her direct involvement on a case-by-case basis
 - **Experimental Parameters** – ACC pre-approved (via AUP) experimental conditions, procedures or research models directly attributable to the research purpose that may alter an animal’s normal physical, psychological and/or behavioural state, e.g. spinal cord injury model: lower limb paralysis
 - **Full Renewal** – Application to the ACC to continue an Animal Use Protocol, which takes place every four years
 - **Normals** – Physiological, psychological and behavioural norms for a given species
 - **Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)** – Provincial governing body responsible to administer the *Animals for Research Act* through regular unannounced inspections of all areas associated with animals used in research, teaching or testing activities
 - **Principal Investigator (PI)** – A scientist responsible for undertaking animal-based science in alignment with an approved Animal Use Protocol and current veterinary standards of animal care
 - **Reasonable Effort** - Attempts commensurate with an animal’s condition and the necessity of timely intervention, as determined by an ACVS Veterinarian
 - **Sick Animal** – Any animal that presents clinical signs reflecting a health and welfare concern – physiological, psychological, and/or behavioural - related or unrelated to experimental design
 - **Sick Animal Response** – A framework – policy and procedures – that facilitates a consistent and appropriate response to sick animals by animal health professionals (the lab animal veterinarian) and their designates in accordance with all regulatory standards
 - **SAR Algorithms** – *Sick animal* diagnosis and treatment decision trees/plans developed by ACVS Veterinarians in conjunction with SAR Designates and PIs and followed by *SAR Designates*
 - **SAR Designate** – An ACVS-veterinarian-approved competent individual who is designated to follow ACVS veterinary *SAR Algorithms* and act under the instruction of an ACVS Veterinarian in sick animal interventions

- **UCAC** – Western’s Senate committee ultimately responsible for the Animal Ethics and Care program directly associated with Western’s Research Community
- **Western’s Research Community** – Institutions and their departments involving animal-based scientists having *Animal Use Protocols* under the jurisdiction of Western’s Animal Care Committee, the ACC

Roles & Responsibilities

Keys to the success of this program are effective collaborative, collegial communications and commitment by all parties to act in good faith.

- ACVS Veterinarians are responsible to
 - diagnose and determine appropriate treatments for clinical cases
 - ensure all treatment regimes are commensurate with their condition as outlined by the Canadian Association for Laboratory Animal Medicine’s (CALAM’s) Standards of Veterinary Care
 - develop animal health monitoring sheets to establish animal model-appropriate assessment parameters that align with CALAM standards of veterinary care
 - provide written SAR Algorithms containing diagnosis and treatment plans to their SAR designates
 - make a reasonable effort to discuss any animal health concerns with the Principal Investigator to determine the most appropriate course of action
 - collegially work together with the PI and Animal Care (AC) staffs in developing and administering treatments to the animals under their care
 - authorize *competent designates* to administer treatments and follow-up on clinical cases in a timely manner

- Principal Investigator (PI) is responsible to
 - ensure all adverse events to animals and associated interventions involving sick animals, as noted above, must be disclosed within the *Animal Use Protocol* at Annual Protocol Renewal and at an AUP’s Full Renewal
 - ensure PI staff members responsible for daily animal health observations to assess the well-being of animals under their care are competent
 - directly involve an ACVS Veterinarian in sick animal diagnosis, treatment planning and follow-up
 - promptly notify ACVS Veterinarians on concerns regarding an animal’s health, behaviour and/or well-being and provide updates on the status of animals undergoing veterinary treatment
 - collegially work together with the ACVS Veterinarians and AC Facility Supervisor in developing and administering treatments to the animals under their care
 - as authorized by an ACVS Veterinarian, oversee or administer treatments and follow-up on clinical cases in a timely manner
 - follow ACVS veterinary-approved SAR Algorithms when intervening directly with sick animals
 - forward to the ACC Executive any non-critical ongoing animal health concerns that cannot be readily resolved through collaborative interactions between an ACVS Veterinarian and AC Facility Supervisor as per the *Concerns Identification, Project Refinement and Corrective Response Policy*
 - ensure documentation associated with sick animal identification, diagnosis, treatments and all associated *Animal Records* aligns with the *Animal Care and Use Records Policy* and is made readily available for review by ACVS Veterinarians and regulators
 - unless directed by an ACVS Veterinarian, hold all bodies associated with *animal morbidity* and *mortality* for post-mortem examination by an ACVS Veterinarian or designate

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- record all *animal morbidity* and *mortality* in distinct logs to be made available at all times and upon request to ACVS Veterinarians, ACC members, and regulatory inspectors, and to be forwarded to the AC Facility Supervisor for inclusion in monthly reporting to the ACC

 - Animal Care Facility Supervisors are responsible to
 - ensure AC staff responsible for daily animal health observations to assess the well-being of animals under their care are competent
 - directly involve an ACVS Veterinarian in the diagnosis, treatment planning and follow-up for *Directed and Critical Animals*
 - promptly notify ACVS Veterinarians on concerns regarding an animal's health, behaviour and/or well-being and related trends, and provide updates on the status of animals undergoing veterinary treatment
 - collegially work together with the PI and ACVS Veterinarians in developing and overseeing or administering treatments to the animals under their care
 - as SAR Designates follow SAR Algorithms when intervening on behalf of an ACVS Veterinarian and follow-up on sick animal cases
 - forward to the ACC Executive any non-critical ongoing animal health concerns that cannot be readily resolved through collaborative interactions between an ACVS Veterinarian and the Principal Investigator as per the *Concerns Identification, Project Refinement and Corrective Response Policy*
 - ensure documentation associated with sick animal identification, diagnosis, treatments and all associated *Animal Records* aligns with the *Animal Care and Use Records Policy* and is made readily available for review by ACVS Veterinarians
 - unless directed by an ACVS Veterinarian, hold all bodies associated with *animal morbidity* and *mortality* for post-mortem examination by an ACVS Veterinarian or designate
 - record all *animal morbidity* and *mortality* in distinct logs to be made available at all times and upon request to ACVS Veterinarians, ACC members, and regulatory inspectors, and forward to the ACC in monthly reporting to the ACC

 - Animal Care & PI Staffs (potential SAR Designates) are responsible to
 - undertake daily animal health observations to assess the well-being of animals under their care
 - directly involve an ACVS Veterinarian in the diagnosis, treatment planning and follow-up for *Critical and Directed Animals*
 - follow the instructions of the ACVS Veterinarian for the care of sick animals
 - as SAR Designates follow SAR Algorithms when intervening on behalf of an ACVS Veterinarian
 - promptly notify their own supervisors, AC Facility Supervisors and ACVS Veterinarians on concerns regarding an animal's health, behaviour and/or well-being and provide updates on the status of animals undergoing veterinary treatment
 - ensure documentation associated with sick animal identification, diagnosis, treatments and all associated *Animal Records* aligns with the *Animal Care and Use Records Policy* and is made readily available for review by ACVS Veterinarians
 - inform supervisor of *animal morbidity* and *mortality*
 - unless directed by an ACVS Veterinarian, hold all bodies associated with *animal morbidity* and *mortality* for post-mortem examination by an ACVS Veterinarian or designate
 - record all animal morbidity and mortality in distinct logs to be made available at all times and upon request to ACVS veterinarians, ACC members, and regulatory inspectors, and to be forwarded to the AC Facility Supervisor for inclusion in monthly reporting to the ACC

Related Documents / References

- Agreement on the Administration of Agency Grants and Awards by Research Institutions – Tri-Agency Animals for Research Act – OMAFRA
- CALAM Standards of Veterinary Care (2007)
- Animal Use Protocols Policy - UCAC
- Animal Care and Use Records Policy – UCAC
- Concerns Identification, Project Refinement and Corrective Response Policy - UCAC
- MAPP 7.12 – Policy for the Use of Animals in Research, Testing and Teaching - UCAC
- MAPP 7.15 - Post Approval Monitoring Program - UCAC