

Example of a Regional Ethics and Safety Screen

The following are not permitted unless otherwise specified:

Fire Hazards

- Operation of a flame, candle, torch, or any other heating device such as a hot plate
- Excessive packing material under the table

Electrical Hazards

- Mains plugs should be either polarized or properly grounded.
- Modifications to CSA approved electrical equipment are not permitted.
- Wet cell batteries may not be displayed (dry cell batteries such as alkalines or NiCd are permitted).
- Electronic equipment created by participants is PERMITTED as long as they have:
 - As low a voltage as possible
 - A non-combustible enclosure
 - An insulating grommet at the point where the electrical service enters the enclosure
 - Low electric current in case terminals are touched
 - Pilot light to indicate when the power is on

Biohazards

- Biological toxins
- Cell or tissue samples (including blood and blood products, except on sealed microscope slides)
- Plants or plant tissue
- Soil containing organic material
- Cultures – no Petri dishes containing media, no Ziplocs with spores, etc. Photos are a good substitute.

Images of Humans

- Displays must avoid sensational or offensive images

Animals and Animal Parts

- Live animals or micro-organisms
- PERMITTED: Items naturally shed by an animal or parts properly prepared and preserved (eg. safely contained quills, shed snake skin, feathers, tanned pelts and hides, antlers, hair samples, skeletons or skeletal parts).

Firearms, Hazardous Materials, and Equipment

- Firearms, ammunition, dangerous goods, or explosives
- Images of humans or animals injured by firearms or explosives
- PERMITTED: X-ray and radiation producing equipment may be displayed but NOT turned on.

Structural and Mechanical Safety

- Any structurally unsound backboard or display
- Sharp edges such as the corners of prisms, mirrors, glass, or metal plates that are not in a case
- Dangerous moving parts such as belts, gears, pulleys, and blades that are not in a guard
- Motors that do not contain safety shut-offs
- Pressurized vessels or compressed gas cylinders
- Moving exhibits (such as robots) that are using more than their allocated space

Chemical Safety

- Flammable, toxic or dangerous chemicals
- Any other chemicals on display other than water or table salt are strongly discouraged. Water, salt, and molasses can be used to simulate other materials. Write "simulated X" on the material.
- Prescription drugs or over the counter medications
- More than 1 L of liquid being displayed

Ineligibility for awards and major ethics violations

- Were more than two students involved in the project at any stage of its development?
- For testing of human subjects:
 - Are forms 4.1A or 4.1B complete?
 - Was informed consent provided? Is confidentiality and anonymity of participants maintained?
- For testing of vertebrate animals (i.e. fish, amphibians, reptiles, birds, and mammals) and cephalopods (e.g. squid, octopus, cuttlefish): Was there a Scientific Supervisor? Did any animals suffer stress? Is form 4.1C complete?

Example of a Project Ethics Screen

Human subjects (YSC policy 4.1.1.1, 4.1.1.2) – review form 4.1A (low risk) or 4.1B (high risk)	Yes	No
Was informed consent obtained from all participants, or from their parents if they were under 19? Was a signed consent form obtained with the following information (unless consent implied as specified in Letter of Information): 1. The printed name and signature of the Participant and the person obtaining the Informed Consent. 2. A statement that the Participant has received and understood the <i>Informed Consent - Letter of Information</i> . 3. The date.		
Was a Letter of Information provided to participants or their parents with answers to the following: 1. What are the name(s) of the investigator(s); school; project title; the Adult Supervisor's name, email address and telephone number. 2. What is the purpose of this research? How will the results of the research be communicated to the participant? 3. What are the benefits to the participant from participating? What are the risks? What time commitment is required? How will the confidentiality of the data be guaranteed? 4. No remuneration or reward will be paid. 5. <i>The participant has the right to withdraw at any time for any reason without consequences of any kind.</i> How does the participant communicate a decision to withdraw from the study?		
Is the confidentiality and anonymity of all participants maintained?		
Did the project test drugs in humans? (note: licensed Natural Health Products, energy drinks, & alcohol not permitted)	4.1B	
Did the project test any of the following ingested substances: 1. Articles not manufactured, sold or represented as food or drink for human beings 2. Foods that contain additives exceeding the Recommended Daily Intake 3. Foods not considered to be basic or everyday foods and for which health benefits are claimed	4.1B	
If the project involved exercise testing, was it supervised by a mentor with training in exercise physiology, and does it follow American College of Sports Medicine guidelines?		
Does the project pose anything MORE than a low level of risk to subjects (low risk: no greater than that encountered in daily life, e.g. surveys of attitudes and beliefs, skill tests, or observations of behavior)	4.1B	

Non-human animals (YSC 4.1.2) – review form 4.1C (vertebrate animals)	Yes	No
Does the project involve vertebrate animals (<i>i.e. fish, amphibians, reptiles, birds, and mammals</i>) or cephalopods (<i>e.g. squid, octopus, cuttlefish</i>)?	4.1C	
If vertebrates were involved, were any studies conducted other than (1) observational studies, and (2) behavioural experiments with positive rewards in which the animal does not suffer stress?	4.1C	
Did the project lead directly to the death of a vertebrate animal?		

Hazardous materials (YSC policy 4.2.1) – if yes, documentation of license/certification/inspection required	Yes	No
Does the project use firearms?		
Does the project use other weapons (pellet guns, paint ball guns, slingshots, potato guns or other propulsion devices)?		
Does the project use volatile or explosive materials?		
Does the project use boilers or pressure vessels > 42.5 L or 103 kPa?		
Does the project use pesticides?		

Recombinant DNA and Biotechnology (YSC policy 4.2.2)	Yes	No
If the project uses DNA, animal viruses, or animal cells/tissue, is there written evidence of qualified supervision (supervisor's name, institution, qualifications)?		
If the project uses animal tissue, is it taken either from a continuously maintained tissue culture line or from animals used in an institutional research project?		
Is there documentation of the source of animal tissues and cells?		
If students were involved in cell culture or animal work – have they taken the appropriate institutional courses and received certification (<i>e.g. Biosafety or Animal Care</i>)?		

CWSF eligibility (YSC policy 3.1.2.1)	Yes	No
Is the project the work of ONLY one or two students from start to completion (<i>ie. there was never more than two students involved in the project work?</i>)		
Is the student(s) in grade 7-12 in a Canadian school and under 21 years of age?		
If entered in a previous CWSF – is the project a substantial expansion or extension of the previous investigation or design process?		

Guideline for committee members completing project screens:

Green – project can be approved; Red – project not eligible; Yellow – refer to student's documentation for further information
Refer to complete ethics policies at ethics.youthscience.ca