

Rules Quick Reference: Forms Check

1. Hazardous Materials, Activities, Devices: **Risk Assessment Form (3)**
 - a. Chemicals, poison, acid, petroleum products, paint, glue, fertilizer etc.
 - b. Power tools, knives, sharp or dangerous objects, machinery
 - c. Fire, heat, oven, burner, radiation, electricity, flammable materials/substances
 - d. Any other potentially dangerous situation or activity
 - e. Exempt Micro-Biology, E-coli k12, algae, bio-fuel, bio-fuel cells, etc.
 - f. Projects that involve human participant testing of any project involving student-designed inventions, prototypes or consumer products

2. **Human Participant Study: Human Participant Form (4) (IRB Pre-Approval)**
 - a. Surveys, tests, opinion studies, etc.
 - b. Tasting, smelling, exercise, etc.
 - c. Medical procedures, blood sugar, blood pressure, DNA kit, etc.
 - d. Using other people to test a product you created or purchased
 - e. Any research involving humans (including yourself) as test subjects

3. **Vertebrate Animal Study: Vertebrate Form (5A) or (5B) (SRC Pre-Approval)**
 - a. Involves any vertebrate animal (dog, cat, fish, chicken, birds, reptiles, etc.)

4. **Biological Agents (microbiology): Hazardous Biological Agents Form (6A) (SRC Pre-Approval)**
 - a. Culturing bacteria, mold, or other microorganisms (can't be done at home)
 - b. E-Coli K-12 does NOT NEED this form, but must be done in a lab

5. **Vertebrate Tissue: Biological Agents Form (6A) & Tissue Form (6B) (SRC Pre-Approval)**
 - a. Blood, blood products (from vertebrate animals or humans)
 - b. Saliva/other bodily fluids (from vertebrate animals or humans)
 - c. Cell or Tissue (from vertebrate animals or humans)

6. Research Done outside home, school or field: **Regulated Research/Industrial Form (1C)**
 - a. Place of business or commercial/private property (stores, churches, offices, facilities, gyms, hair salon etc.)
 - b. Industrial Location (welding shops, machine shop, mechanic shop, etc.)
 - c. School or University other than the one you attend

7. Continuation Project: **Continuation Form (7)**
 - a. Project related to previous year's research

Rules Quick Check: Common Paperwork Mistakes

The rules explained below are some that came up during regional and state fair review of projects. This is not a complete list of rules. This is just meant as a reminder of some of the rules most missed. Please review all rules prior to reviewing student paperwork.

1. Human Participant Study:
 - a. Students who work at a Regulated Research Institution (RRI) must have Institutional Review Board (IRB) approval from the RRI. The school IRB is not sufficient. A copy of the RRI IRB approval must be uploaded in Scienteer.
 - b. Students are prohibited from diagnosing medical conditions, performing medical procedures, or administering medication to human subjects. They may collect data as an observer under direct supervision of a licensed professional at an RRI. The licensed professional must be named in the research plan and approved by the RRI IRB.
 - c. On-line surveys require participant consent and must include a statement similar to the one provided by ISEF: *“There is always the possibility of tampering from an outside source when using the internet for collecting information. While the confidentiality of your responses will be protected once the data are downloaded from the internet, there is always a possibility of hacking or other security breaches that could threaten the confidentiality of your responses. Please know that you are free to decide not to answer any question.”* Surveys should require participants to click a button or type a response indicating consent after the statement is read.
 - d. Form 4 should not have “Not Applicable” selected for any of the age groups of participants. A form 4 indicates that there are human participants, so the IRB needs to select the correct age groups depending on the project and select whether or not written consent is required for those age groups.
 - e. Engineering projects that use human participants, other than the student and a single adult guardian/sponsor, to test or analyze their product require a Form 4 with IRB review. Also, if students test their own engineering product and it requires them to do a physical activity, they need a Form 4 with IRB review.
 - f. The above exemption for students testing their own engineering product that does not require a Form 4 does not extend to projects where students are using themselves as a test subject in an experiment.

Examples:

Project Type	Project Explanation	Human Involvement	Form 4 Requirement
Engineering	Computer software created by student researcher	20 Students tested the software	Required
Engineering	Computer software created by student researcher	Researcher and teacher tested software	Exempt

Engineering	Student created system where video game only works when a bicycle is used	Researcher and teacher tested the system and there is a physical component	Required
Experiment	Blood pressure tested while playing different video games	Researcher	Required
Experiment	Bacteria cultured from hands after using different hand sanitizers	Researcher	Required

2. Vertebrate Animal Study:

- a. Studies performed at a Regulated Research Institution (RRI) require review by an Institutional Animal Care and Use Committee (IACUC). The IACUC review must be uploaded in Scienteer.
- b. Students are not allowed to cause pain, distress, or death to animals in their study. An IACUC may allow this type of study, but it will not be allowed at our fair.

3. Biological Agents (microbiology):

- a. Culturing bacteria, mold, or other microorganisms can't be done at home.

4. Regulated Research/Industrial Form (1C)

- a. Form 1C must be completed by the supervising adult at the university or place of business where the research was done, not by the student or teacher.