



Special Considerations for Reconnaissance and Equipment Use

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Health, Safety and Security

Potential issues:

- ◆ Gastrointestinal illness
- ◆ Contaminated water
- ◆ Dehydration
- ◆ Robbery and theft
- ◆ Culture and expectation of graft or "tipping" (customs, property access, violations)
- ◆ Car accidents (& legal issues)
- ◆ Rabid dog bite
- ◆ Miscellaneous open wound injuries
- ◆ Chemical release from industrial facilities
- ◆ Live wires on ground
- ◆ Radioactive gas release from damaged power plant

Note that:

- ◆ Medical services, including pharmacies, are very limited or non-existent
- ◆ International medicine specialty practices are becoming increasingly available, but may operate at a reduced level of service in disaster settings



Health, Safety, and Security

- ◆ Ensure immunizations are up to date
 - Work with a travel medicine practice *before* leaving
- ◆ Take safety training, first aid, CPR courses
- ◆ Discuss plans w/ your org's health & safety or risk management offices
- ◆ Work with in-country collaborators
- ◆ Example risk management forms will be posted on the RAPID website



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International Missions

- ◆ Before and after mission be in contact with:
 - ◆ U.S. State Department; U.S. embassy officials
- ◆ Check out
 - ◆ State Department Travel Advisories
 - ◆ STEP Foreign Travel Program (register w/ embassy/consulate)
- ◆ U.S. researchers are seen to represent the reconn organization, NSF, and U. S. research community
- ◆ Having in-country collaborators is critical
- ◆ In-country collaborators may have suffered impacts

SECURITY WARNING FOR SOME REGIONS	SECURITY WARNING FOR ENTIRE COUNTRY	DEFER NON- ESSENTIAL TRAVEL TO SOME REGIONS	DEFER NON- ESSENTIAL TRAVEL	AVOID ALL TRAVEL TO SOME REGIONS	AVOID ALL TRAVEL TO THIS COUNTRY	CITIZENS REMAINING HERE DEPART IMMEDIATELY
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Drone Deployment in Post-Disaster Settings

- ◆ Drones may be prohibited
- ◆ Rules and regulations vary by country
- ◆ Bad weather (grounded or bad images)
- ◆ Batteries must be hand-carried on flights
- ◆ *Have a contingency plan for without drone*



Reconnaissance Research Ethics and Guidelines

- ◆ No single standard or well-recognized code of ethics for reconnaissance
- ◆ Good practice to include explicit ethics statement in work plans and proposals
- ◆ Potential reconnaissance ethics issues
 - Interactions with informants and human subjects
 - Access to disaster site
 - Quid pro quo



New Zealand Ethics Guidelines for Post-Disaster Research

Highlights

- ◆ Wear and carry clear identification
- ◆ For private property, contact owner, inform them what data, how gathered, purpose, and potential risks
- ◆ Take no for an answer
- ◆ Minimize researcher numbers/activities in the impacted area
- ◆ Ensure research teams are resource-independent (food/water/tents/fuel)

<http://bit.ly/nz-ethics-guide>



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What Is Human Subjects Research?

- ◆ Both social science AND **engineering** research studies may qualify as human subjects research
- ◆ Federal definition of **"human subject"** (45 CFR 46.102(f))
 - A living individual **about whom** an investigator conducting research obtains...
 - ...data through **intervention or interaction** with the individual **or** identifiable private information
- ◆ Federal definition of **"research"** (45 CFR 46.102(d))
 - **Systematic** investigation, testing or evaluation
 - Designed to develop or contribute to **generalizable** knowledge

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Internal Review Board (IRB)

- ◆ IRBs support researchers to be in compliance with federal and state laws and institution's policy
- ◆ IRBs review & approve initiation of research projects that involve human participants
- ◆ IRB application includes, e.g.
 - Description of project in **plain language**
 - Methods to be used, particularly data collection
 - Informed **consent** procedure
 - **Description of risk** to subjects
- ◆ Expedited review could take 2-4 weeks
 - Unless prior plan with human subjects office



Criteria for IRB Exempt Status

- ◆ Involves survey procedures, interview procedures or **observation** of public behavior, **where:**
 - Information obtained is recorded so that human subjects ***can not be identified***
 - Disclosures of subjects' responses **can not:**
 - Place them at risk of **criminal/civil liability**
 - Damage subjects' financial standing, **employability or reputation**
- ◆ With **elected/appointed public officials**



Criteria for IRB Exempt Status Cont.

- ◆ When there is an existing federal statute that requires complete perpetual confidentiality
- ◆ Research involving the collection or study of **existing data**
 - If these sources are **publicly available**, or
 - If the information is recorded by the investigator so that subjects **can not be identified**
- ◆ **Non-federally-supported** research in which:
 - Subjects are **cognitively-competent** adults, AND
 - Procedures consist **solely** of benign interventions, interactions, or observations of behavior



Advice

- ◆ Get to know your human subjects office contact
 - Tell them about your recon research & make a plan
- ◆ Not sure if what you are doing is human subjects research? Ask your IRB/HSD.
- ◆ Take CITI training asap
 - <http://bit.ly/citi-cert>
- ◆ Delays often caused by
 - Failing to provide necessary information
 - Not writing for a general audience
- ◆ Approval by collaborators' IRB(s) may be required
 - If they are also engaged in human subjects research



Questions?
Advice?