

FIELD SAFETY PROCEDURES - School of Marine Science & Policy

A. TRAINING. Chemical Hygiene and Right to Know training need to be performed and documented by UD's Environmental Health & Safety (EHS) before any field work commences. Many of these items still apply to field work. Supervisors can send a summary of the topics discussed and a signed attendance sheet to EHS. An alternative is to conduct training on BioRaft, which automatically documents the training of each individual.

The set of procedures in this document are for those doing field work that does not require using boats from our small boat fleet. Procedures for small boats can be found at [https://www.udel.edu/content/dam/udelImages/ceoe/documents/marine-operations/UD-Small-Boat-Ops SOP 2017-06-14.pdf](https://www.udel.edu/content/dam/udelImages/ceoe/documents/marine-operations/UD-Small-Boat-Ops_SOP_2017-06-14.pdf)

Recommendations for dealing with many field safety items are available on our web site. These include *Heat stress, Lyme disease, Sunburn and Skin Care, and Lightning*.

The CEOE web site is <https://www.udel.edu/academics/colleges/ceoe/about/safety-resources/>
The EHS web site has useful information and is <http://www1.udel.edu/ehs/>

B. FIRST AID KITS are required for field work. They should be well stocked before going into the field and can be purchased from EHS. Have a bacterial creme (e.g., neosporin) in the kit. Cuts from wood, plastic, etc. are common, and the wound needs cleaned at once.

Any injury, which results in professional medical treatment, needs to be documented by completing the form *First Report Of Occupational Injury Or Disease Reporting* found at <https://www1.udel.edu/ehs/generalhs/indhygiene/employee-injury-rep.html>. An *Illness/Injury Loss Investigation Report* also needs to be completed for an investigation (Go to <https://www1.udel.edu/ehs/generalhs/downloads/Incident%20Investigation%20Form-v2.pdf>). Bring a trash bag to store any trash that accumulates for return and proper disposal.

Plenty of drinking water is required for drinking and cleaning of cuts. Consider bringing other thirst-quenching beverages including those that replenish electrolytes. Be cognizant of heat stress and rest often. **See more about heat stress on our web site.**

Sunscreen: Protect yourself from sunburn and potential skin cancer (melanoma) by using sunscreen (SPF 15 or higher). **See more about sunburn on our web site.**

Bug spray is useful especially for marsh work as greenhead flies and mosquitoes are numerous.

Check for availability of restrooms in the area where you will perform field work. "Little John portable urinals" are available from various vendors (e. g. West Marine), and their use should be considered when restrooms are not available.

C. CHECK THE WEATHER. The forecast must be checked prior to departure, and conditions must be monitored for sudden changes. One can tune to AM radio (1600 and above) or go to several web sites including NOAA (<http://www.noaa.gov/>); the Weather Channel (<http://www.weather.com/>); Accuweather (<http://www.accuweather.com/>); Weather Sentry (<http://www.weathersentry.com/>); DEOS (<http://www.deos.udel.edu/>).

Be particularly aware of approaching **thunderstorms or squalls**, which can be very dangerous. **See the lightning policy on our safety web site.**

The SMSP Ship Operations Web Site has a link to weather and tide information:
<https://www.udel.edu/academics/colleges/ceoe/research/marine-operations/#local-weather>

D. COMMUNICATION DEVICES / WORK AFTER HOURS. *No one is permitted to work alone* in a laboratory or in the field. If it is necessary to work after hours in the laboratory or field, arrangements must be made to work with one additional person for safety considerations (“the buddy system”). It is essential that co-workers treat each other with dignity and respect and exercise the highest level of professional and ethical behavior.

A **communication device** is required for field work in case of an accident or other emergency. Cell Phones are not active in remote areas around the state, including some Delaware Bay-shore beaches (please verify coverage, in-person, ahead of actual field work). If cell phone service is active, ensure your Cell Phone is **fully charged** (consider a back-up battery charger).

A **Garmin Mini2 Satellite Communicator** is available from the small boat fleet when working in an area (land or sea) that is not covered by Cell Phone carriers. This device allows sending a text message (i.e., status updates) with a GPS position to a mobile phone or e-mail. The unit can receive messages, and there is a SOS feature that will notify Garmin’s emergency center, which then notifies emergency responders. Contact Jon Swallow (jswallow@udel.edu) to obtain the device and its instructions, as it is used for small boat and non-boat field work.

When returning from field work, notify your faculty supervisor or lab-based research group by phone, e-mail, or text.

E. PROPER LABORATORY AND FIELD ATTIRE. Sandals, shorts and skirts are not proper attire. They do not protect individuals from spills and other mishaps. Please dress for safety, not for summer convenience. You can always wear pullovers (as medical people wear in operating rooms) in the lab and field over shorts.

Deer ticks are common in DE, and SMSP has had several personnel contract Lyme Disease. **Pants and long-sleeved shirts are recommended** as they can be tucked into footwear and gloves, respectively. **See more about Lyme disease on our web site.**

Footwear: No one is to go barefoot in any building, lab, field area or aboard ship. Closed toe shoes are required. For marsh work, boots or waders are recommended.

F. SAFETY GLASSES – EYE PROTECTION. **When doing field work, wear safety glasses that protect from sunlight / UV radiation!** The effects of UV radiation are cumulative and lead to cataracts. Fisher Scientific sells safety glasses that serve safety and sunlight/UV protection needs (catalog #190421006).

Safety glasses are also needed when doing manual labor such as collecting sediment cores as wood, plastic, etc. can chip off a sampling device and enter an unprotected eye.

G. GLOVES. Gloves for handling biological specimens and chemicals must be available. These will be different from gloves needed for heavier duty work [loading, handling of lines (ropes), sediment coring, etc.].

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