Introduction

Personal gear needs to be prepared with the appropriate equipment and tools for a safe and efficient job performance while deployed. This section provides information on the essential equipment and packing procedures for a safe deployment.

Information contained in this section may or may not be applicable to all responders. Refer to your team leadership for team specific gear requirements.

Module Objectives

After completing this module, learners should be able to:

- Identify the five elements of personal gear and packing.
- Recognize the weight limitations and their application to a deployment.
- Recognize the need for a 24-hour bag.
- Recognize the appropriate personal gear needed for cold and hot environments.

Why This Matters to You

When called upon responders must be packed and ready to deploy. This lesson will provide you guidelines and equipment recommendations so that you will be as prepared as possible for a variety including austere environments.

The Five Elements of Personal Gear and Packing

An easy way to remember what gear to carry and when to bring it is to use the mnemonic M.O.U.S.E., which stands for:

- Mobile
- Organized
- Utility
- Safety and Self
- Environment

Mobile

M stands for Mobile.

All individual equipment will be carried by its owner for some period of time:

- Make sure that the gear is easy to transport in a variety of situations.
- Handles or straps will make equipment easier to carry. The more handles or straps, the easier transport will be. Wheels will make it easier to roll luggage.
- Think about the construction of luggage. Look for heavy-duty materials and large sturdy zippers.

Organized

O stands for Organized.

Avoid the rush to pack gear. Keep gear packed, organized, and ready to go:

- Take enough toothpaste, shampoo, medications, underwear, and other personal items for two weeks.
- Count on one or two loads of laundry while gone.
- Take at least three days' supply of milk and water.
- Store supplies together in a box or on a shelf so that there is no need to hunt around to find them
- Make a list of items that will have to be packed at the last minute (e.g., sunglasses, wallet, book).

Tips for packing:

- Practice packing and unpacking. Things never fit as easily when packed in the
 field as when packed at home. Pack everything, let it sit for a day, and then try to
 find a particular item to test if things can be easily found. Experiment until the
 results are satisfactory.
- Use the "bags within bags" method of packing by placing related items in small bags inside the main one.

Utility

U stands for Utility.

Consider the tools needed to accomplish each task (e.g., setting up base camp, providing medical care).

Take all necessary items, keep them in the right place, and know where to find them.

Safety and Self

S stands for Safety and Self.

It is impractical and even impossible to carry all personal gear all the time:

- Carry critical items in a personal ready bag (24-hour bag). This includes food, rain gear, work gloves, a flashlight, eye and ear protection, Meals Ready-To-Eat (MREs), N95 or N100 respirator masks, first aid supplies, medications, a hygiene kit, and waterless hand cleaner.
- Also consider bringing eyeshades, earplugs, anti-snoring aids, comfortable clothes, shoes, a swimsuit, beach sandals (shower facilities may not be clean or private), snacks, books, and cards or games.

Environment

E stands for Environment.

Think of the weather and other environmental factors:

- Pack applicable personal protective equipment (PPE).
- Bring civilian clothes for a standby deployment to eat or move about in public without attracting attention to yourself during a high-profile public event.
- Wear sturdy boots and two pairs of socks at the same time (lighter and heavier) for foot protection when on deployment.

The NDMS Uniform

The Department of Health and Human Services (HHS) and Federal regulations define and prescribe how the NDMS uniform should be worn. Refer toOPS.002 for a detailed description of the uniform.

At least three sets of uniforms are highly recommended.

Information for Warm Environments

The following items are appropriate for warm weather deployments:

- Light-colored, loose-fitting clothes: Breathe more readily, are easier to pack, dry faster, are cooler on hot days, and attract fewer insects.
- Long sleeves and pants: Provide warmth, protect against the sun, and discourage insects.
- A hat: Protects against the weather. The uniform hat is a khaki, black or navy blue baseball cap. In the field, you may choose to wear a full brimmed, khaki "boonie" hat instead of the baseball cap. This type of hat provides better sun protection but is not a replacement for the required baseball-style cap (regulation uniform hat).
- Additional items to bring in warm weather deployments:
 - Sunglasses,
 - Sunscreen,
 - Insect repellent,
 - Lip protection,
 - Skin lotion, and
 - Foot powder.

Information for Cold Environments

The following items are appropriate for cold weather deployments:

- A warm shirt and pants (wool or fleece):
 - Either khaki or blue if work over uniform.
 - Any color if worn underneath the uniform.

- Two pairs of socks worn together:
 - One lightweight (like Thinsulate TM) and one medium weight (like wool).
 - Reduces the incidence of hot spots and blisters.
- Materials to avoid in cold weather deployments:
 - Cotton:
 - Retains moisture.
 - Does not dry easily.
 - Wet means cold!
 - Down stuffing:
 - Does not dry easily.
 - Does not insulate when wet.
 - Choose synthetic fill instead.
 - Flannel outer-shell in sleeping bags:
 - Does not block wind.
 - Is heavy.
 - Gets dirty easily.
 - Flannel inside lining is OK.

A black ski cap or balaclava instead of a hat.

A khaki, M-65 military field jacket:

- Must have the same patches and identification as the uniform shirt.
- A rain suit is recommended because working with patients is often difficult when HHS Responder is wearing a poncho.

Layering System – The Three W's

Use the Three W system of layering for sleeping gear and clothing.

The Three W's stand for:

- **Wicking** Inner layer's purpose is to wick moisture away from the skin (e.g., synthetics, silk materials).
- Warmth Thermal layer's purpose is to keep warmth in (e.g., fleece, wool).
- **Weather** Outer layer is needed for protection from weather (e.g., treated synthetics, Gortex TM).

Carrying Gear

Distribute all gear between two bags:

- A ready bag to carry at all times:
 - Use a backpack instead of a gear bag.
 - The bag should weigh no more than 4 to 6 pounds.
- A gear bag as your main pack or bag containing the majority of personal gear:
 - The weight should be a maximum of 45 pounds in summer and 64 pounds in winter (because of the greater amount and weight of winter clothing).

The owner should be able to carry both bags at the same time. If a gear bag is a backpack, the ready bag should hang over the shoulder or be attached to the backpack.

A ready bag is a carry-on size case that contains the gear, food, and water needed for 24 hours. Some people refer to it as a 24-hour bag or a "go bag." The ready bag is carried at all times. Daypacks and fanny packs make good ready bags.

The gear bag carries the bulk of personal equipment. Items that may violate airline or transportation safety regulations should be packed in a gear bag for the initial departure and return. Bring enough personal gear to last two weeks. Bring enough food for three days and four quarts of water.

A gear bag may not be under an individual's direct control during transport so pack it accordingly. Consider rough handling at the airport when selecting luggage. Backpacks are easy to carry over rough terrain.

Types of Gear Bags - Backpacks

Backpacks are strongly recommended but not required. Backpacks come in a variety of sizes, shapes, designs, and colors.

If a backpack has a frame, it must be an internal frame backpack, a medium ALICE (all-purpose lightweight individual carrying equipment) pack with or without an external frame, or a larger one with an external frame. There are a wide variety of internal frame backpacks on the civilian marketplace capable of handling abuse and with enough capacity for a self-sustainable NDMS mission of 72 hours.

The military ALICE pack is one of the very few external frame packs capable of withstanding the continued abuse of military loadmasters and civilian baggage handlers. A medium ALICE pack will hold all the necessary gear for a self-sustainable NDMS mission of 72 hours.

The key is to minimize the size of the backpack so it is as small as possible, but still able to hold what is needed.

Types of Gear Bags – Duffel Bags

If a backpack is not utilized, place equipment directly into a duffel bag. Note: Duffel bags are not recommended because:

- It is not easy to carry them for any distance.
- These types of bags do not provide enough cushioning to protect equipment from rough baggage handling.

If using a backpack and a duffel bag, the duffel bag must be large enough to hold the fully loaded backpack since only one ready bag is allowed for all personal gear.

The key is security and ease of transport. Look for thick material (like ballistic nylon or heavy canvas), few (if any) outside pockets, and sturdy zippers that can be locked to the end of the bag.

When not being carried, the duffel bag should be locked and "secured" to some fixed object if possible. Invest in an inexpensive bicycle cable (with a combination lock) to secure a duffel bag to a fixed object.

The NDMS/DMAT Equipment List

NDMS has created a Recommended Personal Equipment List which includes the following types of items:

- Uniforms and other clothing.
- Gear.
- Personal hygiene.
- Sleeping.
- Equipment.
- Cooking and food.

Follow the NDMS/DMAT equipment list. In addition, individual teams may have customized equipment lists.

When Traveling on Airlines

Restricted items to put in gear bag (not in ready bag):

- Fireworks,
- Explosives,
- Butane lighter refills,
- Paints,
- Bleaches.
- Compressed gases,
- Knives,
- Scissors or shears of any kind,
- Straight-edged and certain other razors,
- Box and carpet cutters, and
- Ice picks.

Liquid or gas fuels for stoves should not be carried. They will not be allowed on military or civilian aircraft, and they can ruin gear if they leak. Instead, consider obtaining fuel at the destination (not always possible) or investing in solid fuel tabs such as trioxane. In addition, compressed gases should not be carried in gear.

Conclusion

When on deployment, it is important to have what you need to work efficiently and rest effectively:

- Use M.O.U.S.E. when selecting and packing gear.
- Take only what is needed based on the length of deployment.
- Choose items that can do "double duty."
- Pack in advance and practice packing and unpacking bags.

- Have the required uniforms available.
- Pack appropriately for weather and other conditions (remember the Three W's).
- Know what can and cannot be transported in ready and gear bags.
- Label everything with name and initials especially gear bag and uniform.

Think about it: What if you have to spend 24 hours in the airport hangar? What might you want to have in your ready bag?

Bibliography

The following resources were used to develop the content of this module:

- **Berger, Karen.** (1995). Hiking and backpacking: A complete guide. New York: W. W. Norton & Company.
- **Berger, Karen.** (1997). Everyday wisdom: 1001 expert tips for hikers. Seattle, WA: The Mountaineers Books.
- Fletcher, Colin. (1984). The complete walker III. New York: Random House.

Additional Resources

The following Web sites provided information associated with this module:

- http://www.thebackpacker.com A Web site dedicated to the backpacking and hiking community. It is intended as a place for beginners to learn about backpacking and a meeting place for more experienced backpackers.
- http://www.actiongear.com Brigade Quartermaster gear catalog to place orders and interact with other customers.
- http://www.cabelas.com Cabela's gear retail store online.
- http://www.campmor.com Campmor gear retail store online.
- http://www.chiarmy.com Chicago Army/Navy Surplus Company specializing in tactical equipment, uniforms, safety vests, and other essential military equipment.
- http://www.galls.com Gall's online catalog with a section on disaster management (e.g., PPE, Haz-Mat).
- http://www.gorp.com Great Outdoors Recreation Pages site with a section on gear.
- http://www.rangerjoes.com Ranger Joe's military and law enforcement gear catalog online.
- http://www.rei.com REI's online catalog for campers.
- http://www.uscav.com U.S. Cavalry military, law enforcement, and homeland security equipment along with counterterrorism training and discussion.