

A hiker is silhouetted against a vibrant sunset sky, standing on a rocky mountain peak. The hiker is wearing a backpack and using trekking poles. The sky transitions from a deep orange near the horizon to a lighter, hazy blue at the top. The foreground shows the rugged, rocky terrain of the mountain.

Fort Bliss
Garrison Safety Office
A Commander's Tool

For

COLD WEATHER SAFETY
Identify, React/Treat
and Prevention



Purpose

Establish and implement a Command cold weather safety program that:

- **Preserves human and material resources**
- Sustains combat readiness and mission capabilities
- Counters known adverse trends for cold weather affects

Objectives

- Use strengths and responsibilities of **leaders**, the safety team, and all others to preserve resources and *and counter cold weather risks*
- Reemphasize Safety as an **instinctive priority** - not an afterthought
- Integrate Risk Management as the root process for all operations and tasks

Preparation For Winter

Facilities:

- Individual Service Member
 - Inspect living and working facilities for holes/cracks in the structure that can be self repaired with duct (100mph) tape.
 - Inspect for job-order submission projects (ie; door jam jarred, windows that won't close, missing/defective door seals, etc.) and report to Camp Mayor
 - Have extra blankets and sleeping bag available in that facilities with the Chico heating unit are limited in heat capacity.
 - In case of heavy snow the Camp Mayor will have a shovel and roof snow rake
 - Maintain free and clear means of egress.
 - Do not hang or install flammable items for partitions (ie; poncho liner, blanket, shower curtain, etc.)

NOTE: Ensure fire extinguishers are available and serviceable

DO NOT staple/affix electrical cords to walls or furniture

Preparation For Winter (continued)

Equipment:

- *Unit Level*
 - Prepare all tactical vehicles and generators
 - Conduct winter driver training (see attached presentation)
 - Conduct individual cold weather injury prevention training (see attached presentation)
 - Ensure individuals have the appropriate cold-weather inventory
 - Identify and mark prior cold-weather injured individuals and others susceptible to a cold weather injury
 - Ensure cold weather factors are incorporated into mission/operation composite risk management plans
- *Individuals*
 - Dress in proper layers
 - Report any cold weather exposure symptoms immediately to first-line supervisor

CHIGO A/C Operating Tips

1. When you need cooling, switch the mode to the “snowflake”, when you need heating, switch the mode to the “sun”. The tear drop mode is for “dehumidification”. It is **NOT** used in this location. The triangle shape is for the “auto” mode and should not be used without additional training.
2. **DO NOT** run unit on “continuous” heat or “continuous” cool. “Continuous” heat may prevent the unit from performing it’s “Defrost” cycle and result in the formation of ice. “Continuous” cool can cause the evaporator coil to freeze, reduce cooling capacity, leak moisture and potentially cause unit failure. Manufacturers recommended minimum cooling set point is 22°Celsius. **FYI**: Increasing or decreasing the value on the remote control **DOES NOT** add heat or add cooling. It programs a set point for which the unit will try to achieve. “CONTINUOUS” heat or cool in this climate exceeds the normal operating limits for the unit.
3. “HIGH POWER” will only provide heat or cool for 15 minutes and you will notice a “red” light turning on. It is recommended **NOT** to run in “high power”.
4. It is recommended **NOT** to run unit in “ECONO”.
5. During the “defrost” cycle of the “heating” mode, the unit will shut down, steam may be visible coming from the outside unit and the unit may smell hot. The unit is **NOT** burning up. If you see flames, **then** attempt to extinguish them and report the fire as you would for any other fire.
6. After the “defrost” cycle has completed, you will here a noise from refrigerant gushing into the coil. The noise can be somewhat loud and is perfectly normal.
7. When switching from the “heat” mode to the “cool” mode and vice versa, the unit has approximately a three minute startup delay.
8. When the unit goes from “defrost” to “heat”, or from “cool to “heat” or when the unit is turned from off to on and it is in the “heat” mode, the unit’s “green” light will blink “on and off” while the coil is heating up to prevent blowing cold air. Be patient, it could take 5 or more minutes. If the unit blinks “ORANGE” is has “timed out”, there may be mechanical problems, contact the number below and a service technician will be dispatched.
9. Keep the remote located near the unit, **NOT** in your personal sleeping area. Service techs may need your remote to accurately assess the existence of a problem! Do not use different remotes. You will change the settings on the unit and some remotes are **NOT** interchangeable

CHIGO A/C Operating Tips

10. If unit goes off because of power failure there is a good chance it will NOT START on its own and will have to be **RESTARTED** using the remote. When unit is restarted, it returns to the last setting stored in the units memory. IF unit still doesn't start lift cover and push manual start button on the lower right side of inside unit using a pen or pencil. If a manual restart is necessary, call the number below and a service technician will be dispatched.
11. Keep outside unit free of objects and debris. Restricting air circulation around the outside unit will cause it to run inefficiently and potentially cause irreparable damage.
12. If you notice frost that is normal. If you notice ice building up on the outside coil, try running the unit in the "cool" mode for 5 to 10 minutes or until the ice has melted, and then refer to TIP #3. If you notice ice building up on the inside unit, check filters and insure remote set point is not set below 22° Celsius.
13. Periodically pull out filters by lifting access cover and clean by "banging" off dirt or rinsing with water.

To dispatch a service technician CALL 231-4644, KBR SERVICE OPERATIONS, 7 days a week, 24 hours a day

CELSIUS TO FARENHEIT CONVERSION

Deg. Celsius	Deg. Farenheit
20	68.0
21	69.8
22	71.6
23	73.4
24	75.2
25	77.0
26	78.8
27	80.6
28	82.4

FACTORY RECOMMENDED
OPTIMAL RANGE

Less Than 20° Celsius –
FREEZE-UP LIKELY

Outline

- › Effects of Adverse Weather on Equipment and Cargo
- › Maintenance in Winter Weather
- › Driving Techniques
- › Risk Assessments



Effects Of Weather On Equipment

Cold weather engine starting and warm-up procedures apply...

"DO NOT RACE ENGINE!"

Vehicles with Glow Plugs – Must not start until the "WAIT" light is off!

CLEAN THE VEHICLE COMPLETELY!

*** Good all-around visibility is the first requirement for safe winter driving.**



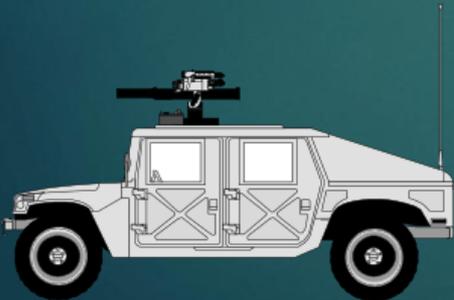
- *Remove all snow and ice from vehicle and trailer*
- *Good all around visibility is essential*

Defrosters

- If defrosters are not available, wedge the rear of the hood open so the heat from the motor is vented toward the windshield.

** Heaters should be checked daily.*

- Cover the windshield when parked (especially at night)



Engine Shutdown



1. Ensure that the vehicle cools down properly before shutting down the engine.
2. Attempt to park the vehicle so that the engine is not facing directly into the wind.
3. Raise the wipers away from the windshield to prevent the wipers from freezing to the windshield.
4. During extreme cold weather, the vehicle should be started every 4 hours to keep the battery charged

That's
An
Order



CHECK



Use the Appropriate TM!!



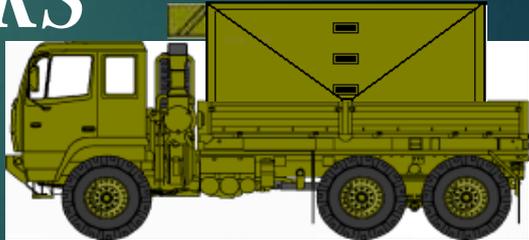
👉 *TIRES*

👉 *COOLING SYSTEM*

👉 *BATTERIES*

👉 *EXHAUST SYSTEM*

👉 *WIPERS*



👉 *LIGHTS*

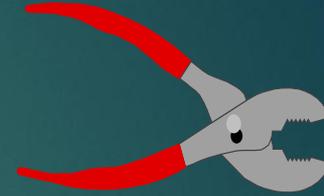
👉 *FLUID LEVELS*

👉 *HEATERS/DEFROSTERS*

👉 *PERSONAL GEAR*

Daily PMCS is
Essential and Required

Maintenance Points



- ▶ Proper Maintenance Habits Are Even More Critical In Cold Weather. PMCS will save your life!!



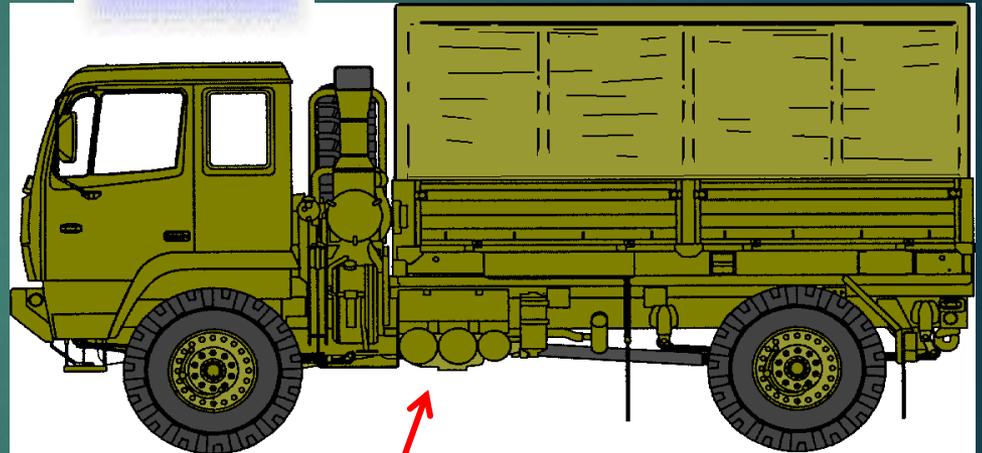
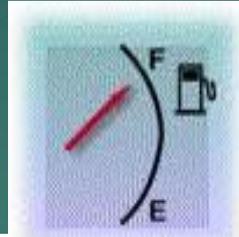
- ▶ Antifreeze/Coolant Should Be Checked At Regular Intervals (-60) On All Equipment That Requires Coolant , Or At Least Twice Per Year. (Spring/Fall)



- ▶ Ensure Windshield Washer is Washer Type Antifreeze to -20 or More and, If Applicable, Alcohol Bottles Are Replenished.

Maintenance Points

- Keep All Fuel Tanks As Full As Possible To Keep Moisture From Condensing Inside Fuel Lines And Tanks. Filter The Fuel Through A Chamois To Remove Water.
- Drain The Air Tanks Each Time You Stop. This Reduces The Chance Of Moisture In The Air Tanks And Lines.



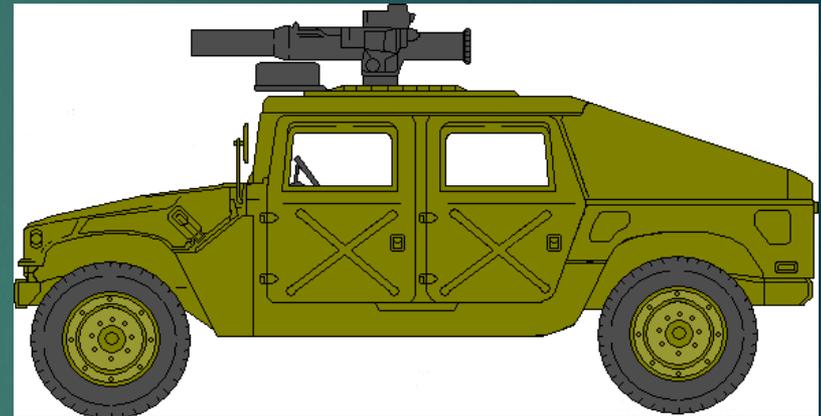
**Drain Daily
To Prevent
Freezing**



Maintenance Points



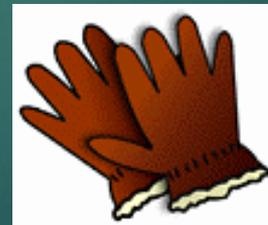
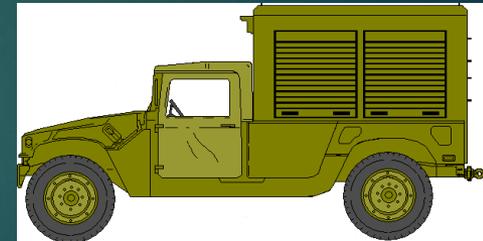
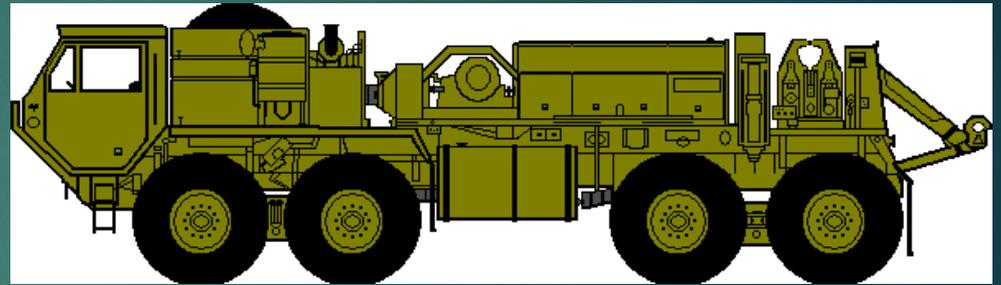
- ▶ On Brief Halts, During Extremely Cold Weather, Let The Engine Run At A Fast Idle So That The Ammeter Shows A Charge.



- * Burns Fuel Better
- * Maintains Even Engine Temperature

Maintenance Points

- ▶ When Performing PMCS - Do Not Touch Metal With Your Bare Hands.
- ▶ When Climbing On Vehicles, Use Extreme Caution - Remember, Three Points Of Contact At All Times.





WINTER

Cold Hard Facts

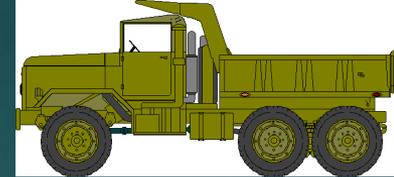
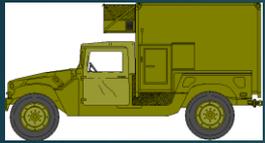
- ▶ **ADJUST** to Conditions
- ▶ **SLOW** on Hills and Grades
- ▶ **INCREASE** Following Distance
- ▶ **MAINTAIN** Steady Steering
- ▶ **EASY** on The Brakes
- ▶ **DOWN SHIFT** to Lower Gear Before Going Down Hills and Grades



Defensive Driving Techniques

- ▶ Drive At Reduced Speeds So You Can Stop Quicker
- ▶ Give Turn Signals Sooner Than Usual. This Gives Other Drivers More Time To React
- ▶ Pump Your Brakes To Warn Of Your Intention To Stop
- ▶ Maintain At Least Triple The Normal Distance From The Vehicle Ahead.

Distance



100 Meters

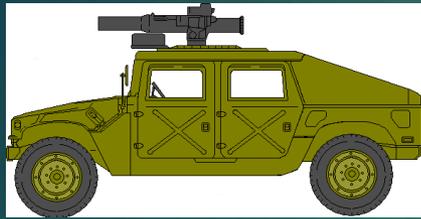
500 Meters

**Ideal Road
Conditions**

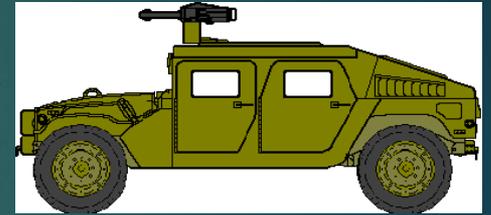
**Poor Road
Condition**

➤ **Three To Eleven Times More Distance Is Required To Stop A Vehicle On Pavement Covered With Ice Or Snow.**

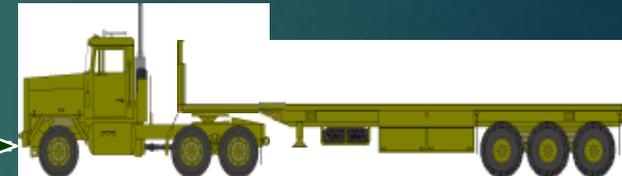
Timed Distance



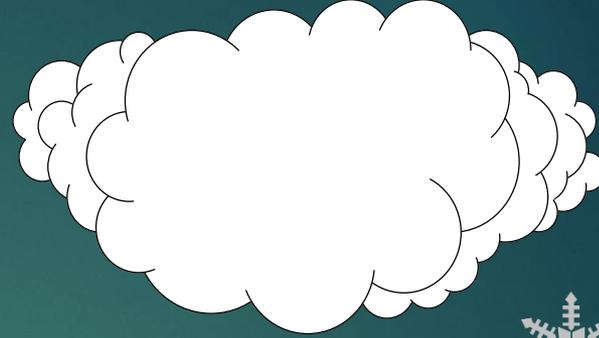
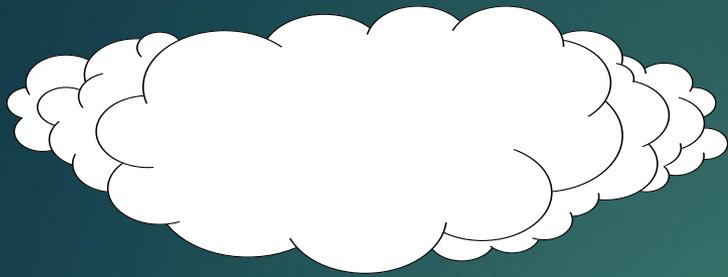
6 SECONDS



10 SECONDS



- Find a fixed object and count after the vehicle in front passes it.
- One Thousand and One – One Thousand and Two and so on.
- You should be at a safe distance for the winter conditions.



Fresh Snow May Conceal An Icy Road Surface.



Operating On Snow And Ice



- ▶ Start Driving In Second Or Third Gear Rather Than First Or Low.
- ▶ Engage The Clutch Gradually (Or In D2, High With Automatic Transmission)
- ▶ Accelerate No More Than Necessary To Keep From Stalling.

*** Avoid Quick Acceleration On Slick Roads - It Will Cause You To Skid.**

What To Watch For

- **Bridges, Overpasses, Underpasses - Due To Cold Air, *These Freeze First***
- **“White Ice” - Compacted Snow, Slightly Melted, Then Refreezes At Night**
- **“Black Ice” - Clear Water That Freezes On Black Pavement**
- **Mountain Sides – Assess The Slope**
- **Curves - Slow Down Before**
- **Intersections - Slippery Areas Due To Cars Starting & Stopping**

Black Ice

Dangerous Because You Can't See It!

Most Common Areas Where You Find It:

- Bridges and Overpasses
- Shaded areas



Black Ice

REACTION

- **Do Not Panic!**
- **Make No Sudden Changes In Speed Or Direction!**
- **Ease Off Accelerator!**
- **Steer In Direction That The Rear Of The Vehicle Is Skidding!**



When Driving In Fog, Use Low-beam Headlights

Stop, Off The Roadway, And Wait

Hills And Grades



When approaching a hill or upgrade / downgrade remember to do the following:

- Select the proper gear before approaching, usually a lower gear.
- Use the same gear going down that you used going up. This will allow the engine to act as a brake, so you will not have to use your brake excessively.

(On steep or very slippery grades, use at least one gear lower, and go slower)

Skids

Result From Unexpected Forces:

1. Black Ice
2. Driving too fast for conditions
3. Sudden steering corrections or braking
4. Sudden acceleration

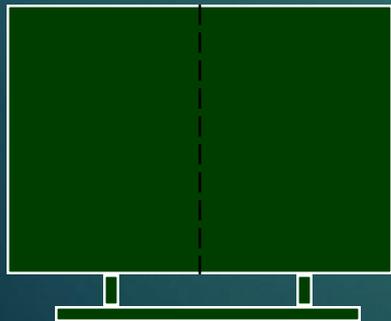
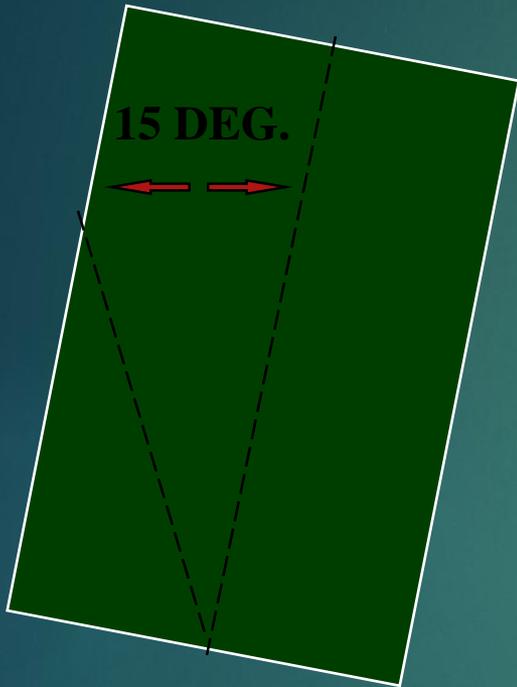


Skids Continued

If your vehicle begins to skids, take the following actions:

- **Front end skids** - Release the brake and let the front wheels roll freely to regain traction and steering control.
- **Rear end skids** – For non-ABS systems, Take foot off of accelerator and turn wheels in the direction that the rear of the vehicle is skidding, and pump brakes lightly.

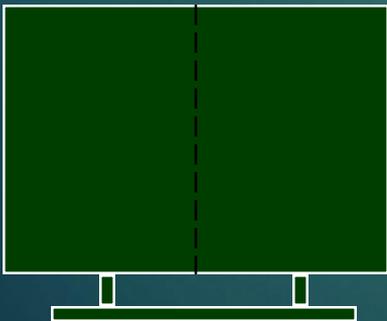
Vehicle Jack-knife Prevention



**Brake before the turn, not in the turn
accelerate smoothly and slowly.
Decelerate slowly, and ease up on the
brakes. Make smooth gear shifts and
clutch engagements. Steer in the
opposite direction the trailer is
skidding, while pumping the brakes
lightly.**

Vehicle Jack-knife

A Jack-knife Occurs When The Angle Between The Tractor And Trailer Gets To A Point Where It Can't Be Straightened Out By The Driver.



Composite Risk Management

▶ EXPERIENCE

- ▶ LIVING ENVIRONMENT (Driving in snow/on ice)
- ▶ YEARS AND MILES DRIVEN
- ▶ DRIVERS SELECTION FOR MISSION
- ▶ SITUATIONS
- ▶ VEHICLE CONDITION

▶ ROAD CONDITIONS

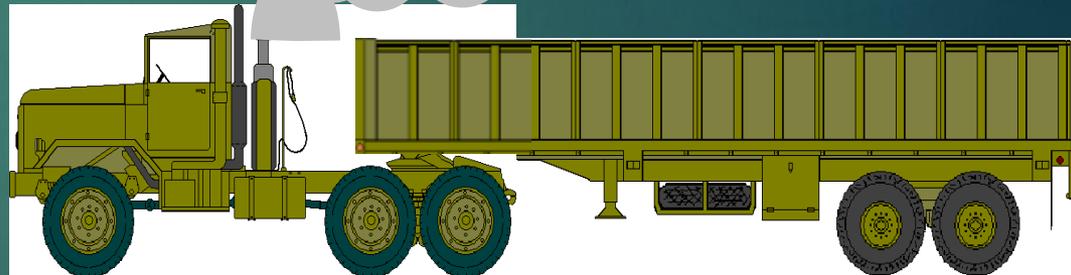
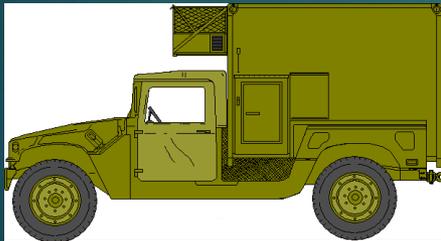
- ▶ RED
- ▶ AMBER
- ▶ GREEN



Carbon Monoxide

In spite of public service announcements, each year too many people die as a result of carbon monoxide poisoning. Many are exposed to levels so dangerous that medical attention is required.

**Carbon
Monoxide
ALERT**

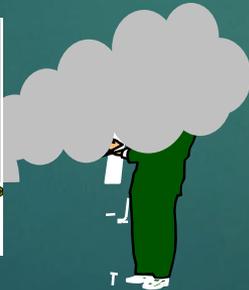
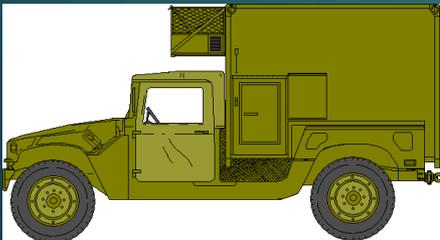


DANGER

Carbon Monoxide Poisoning

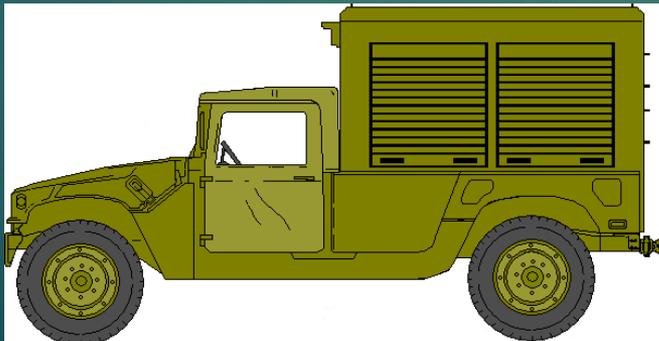
Carbon Monoxide

1. Odorless & Colorless
2. Nausea & Dizziness
3. Causes soldiers to become sleepy
4. In extreme cases it can be fatal



Carbon Monoxide Prevention

1. Never Run Engine With Windows Up
2. Checks Exhaust Daily For Leaks (Part Of PMCS)
3. Always Leave At Least One Window Cracked While Driving



Key Driving Tips



- **Practice Risk Management**
- **Allow More Time To Travel**
- **Maintain More Space**
- **Drive With Your Lights On**
- **Wear Safety Belts**
- **Look Well Ahead**
- **Anticipate Problems**
- **Have The Proper Snow And Personal Equipment**

Winter sun

Intensity of the winter sun can be dangerous! It reflects off snow and ice and can be blinding.

Sunglasses should be considered as PPE for winter driving

Wear Quality Sunglasses

Good quality sunglasses help highlight changes in the terrain and road surface, even in low visibility conditions

Tip: When in a white out, wear sun glasses!

Winter Injury Prevention



Regulation of Body's Temp

▶ How the Body Produces Heat

- ▶ **metabolism**
- ▶ **exercise**
- ▶ **shivering**

▶ How the Body Loses Heat

- ▶ **convection**
- ▶ **conduction**
- ▶ **radiation**
- ▶ **respiration**
- ▶ **evaporation**

Typical Victim of a Cold Weather Injury

- ▶ Male
- ▶ E-4 or below
- ▶ Approximately 20 years old
- ▶ From a warm climate
- ▶ Less than 18 months time in service
- ▶ Uses tobacco, alcohol or medications
- ▶ Neglects proper foot care

Susceptibility Factors

- ▶ Previous cold weather injury
- ▶ Inadequate nutrition
- ▶ Alcohol, caffeine, nicotine
- ▶ Dehydration
- ▶ Overactivity
- ▶ Underactivity
- ▶ Long exposure to the cold
- ▶ Sick or injured
- ▶ Acclimatization
- ▶ Ethnic/geographic origin
- ▶ Wind, cold, rain
- ▶ Age
- ▶ Discipline and morale
- ▶ Physical stamina
- ▶ Inadequate training
- ▶ Poor clothing and equip

Types of Cold Injuries

- ▶ Hypothermia
- ▶ Frostbite
- ▶ Chilblains
- ▶ Immersion/Trench Foot
- ▶ Dehydration
- ▶ Constipation
- ▶ Sunburn
- ▶ Snow Blindness
- ▶ Carbon Monoxide Poisoning

Hypothermia

- ▶ MEDICAL EMERGENCY; life threatening condition
- ▶ Severe body heat loss-body temp falls below 95°F
- ▶ Occurs when:
 - ▶ **conditions are windy, clothing is wet, and/or the individual is inactive**
 - ▶ **extended water exposure or immersion**
 - ▶ 1 hour or less when water temp is below 45°F
 - ▶ prolonged exposure in slightly cool water (e.g. 60°F)
 - ▶ thunderstorms, hail, rain and accompanying winds

Hypothermia

The “umbles”-stumbles, mumbles, fumbles, and grumbles

▶ Initial Symptoms

- ▶ shivering
- ▶ dizzy, drowsy
- ▶ withdrawn behavior
- ▶ irritability
- ▶ confusion
- ▶ slowed, slurred speech
- ▶ altered vision
- ▶ stumbling

▶ Severe Stages

- ▶ stops shivering
- ▶ desire to lie down and sleep
- ▶ heartbeat and breathing is faint or undetectable
- ▶ unconsciousness followed by **DEATH**

Hypothermia

- ▶ Treatment
 - ▶ prevent further cold exposure
 - ▶ evacuate immediately if severe hypothermia
 - ▶ remove wet clothing
 - ▶ rewarm with body-to-body contact or in a warmed sleeping bag
 - ▶ warm, sweet liquids if conscious
 - ▶ give CPR if needed

Hypothermia

- ▶ Prevention
 - ▶ **eat properly and often**
 - ▶ **warm liquids (noncaffeinated) and water**
 - ▶ **wear uniform properly (layers worn loosely)**
 - ▶ **keep active**
 - ▶ **stay dry**
 - ▶ **warming tents**
 - ▶ **get plenty of rest**
 - ▶ **buddy watch/observation/NCO checks**

BODY TEMP	SYMPTOMS	OBSERVABLE IN OTHERS	FELT BY YOURSELF
(Early Stage) 98.6 ⇒ 95.0	Intense and uncontrollable shivering; ability to perform complex tasks impaired	Slowing of pace. Intense shivering. Poor coordination.	Fatigue. Uncontrollable fits of shivering. Immobile, fumbling hands.
(Moderate Stage) 95.0 ⇒ 91.4	Violent shivering persists, difficulty in speaking, sluggish thinking, amnesia begins to appear.	Stumbling, lurching gait. Thickness of speech. Poor judgment.	Stumbling. Poor articulation. Feeling of deep cold or numbness.
(Severe Stages) 91.4 ⇒ 87.8	Shivering decreases; replaced by muscular rigidity and erratic, jerky movements; thinking not clear but maintains posture.	Irrationality, incoherence. Memory lapses, amnesia. Hallucinations. Loss of contact with environment.	Disorientation. Decrease in shivering. Stiffening of muscles. Exhaustion, inability to get up after a rest.
87.8 ⇒ 85.2	Victim becomes irrational, loses contact with environment, drifts into stupor; muscular rigidity continues; pulse and respiration slowed.	Blueness of skin. Decreased heart and respiratory rate. Dilation of pupils. Weak or irregular pulse. Stupor.	Blueness of skin. Slow, irregular, or weak pulse. Drowsiness.
85.2 ⇒ 78.8	Unconsciousness; does not respond to spoken work; most reflexes cease to function; heartbeat becomes erratic.	Unconsciousness.	
78.8 ↓↓	Failure of cardiac and respiratory control centers in brain; cardiac fibrillation; probable edema and hemorrhage in lungs; apparent death.		

Frostbite

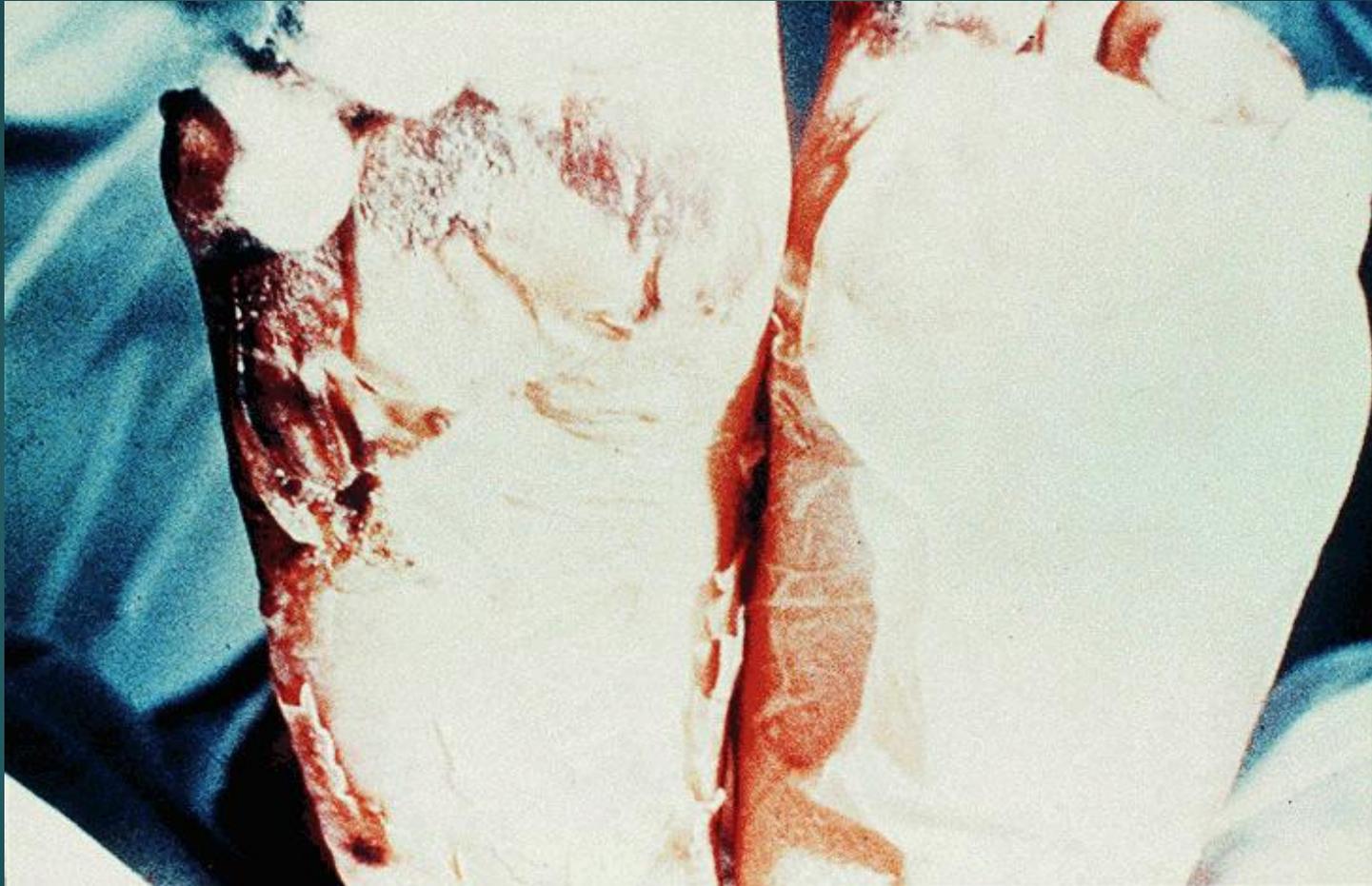
- ▶ Air temps below 32°F
 - ▶ **skin freezes at 28°F**
- ▶ Superficial frostbite (mild)
 - ▶ **freezing of skin surface**
- ▶ Deep frostbite (severe)
 - ▶ **freezing of skin and flesh, may include bone**
- ▶ Hands, fingers, feet, toes, ears, chin, nose, groin area

Frostbite

▶ Symptoms

- ▶ initially redness in light skin or grayish in dark skin
- ▶ tingling, stinging sensation
- ▶ turns numb, yellowish, waxy or gray color
- ▶ feels cold, stiff, woody
- ▶ blisters may develop

Deep Frostbite



Frostbite

- ▶ Treatment
 - ▶ remove from cold and prevent further heat loss
 - ▶ remove constricting clothing and jewelry
 - ▶ rewarm affected area evenly with body heat until pain returns
 - ▶ when skin thaws it hurts!!
 - ▶ do not rewarm a frostbite injury if it could refreeze during evacuation or if victim must walk for medical treatment
 - ▶ do not massage affected parts or rub with snow
 - ▶ evacuate for medical treatment

Frostbite



Frostbite

▶ Prevention

- ▶ wear uniform properly (layers and loosely)
- ▶ keep socks and clothing dry (use poly pro/thermax liner socks and foot powder/ change insoles also)
- ▶ protect yourself from wind
- ▶ drink hot fluids and eat often
- ▶ keep active
- ▶ insulate yourself from the ground (sleeping pad/tree branches etc...)
- ▶ “Buddy System”
- ▶ warm with body heat
- ▶ caution skin contact with super-cooled metals or fuel
- ▶ seek medical aid for all suspected cases

Chilblains

- ▶ Nonfreezing cold injury
- ▶ Cold, wet conditions (between 32-60°F, high humidity)
- ▶ Repeated, prolonged exposure of bare skin
- ▶ Can develop in only a few hours
- ▶ Ears, nose, cheeks, fingers, and toes

Chilblains

- ▶ Symptoms:
 - ▶ initially pale and colorless
 - ▶ worsens to achy, prickly sensation then numbness
 - ▶ red, swollen, hot, itchy, tender skin upon rewarming
 - ▶ blistering in severe cases



Chilblains

- ▶ Treatment
 - ▶ prevent further exposure
 - ▶ wash, dry gently
 - ▶ rewarm (apply body heat)
 - ▶ don't massage or rub
 - ▶ dry sterile dressing
 - ▶ seek medical aid

Chilblains

- ▶ Prevention
 - ▶ keep dry and warm
 - ▶ cover exposed skin
 - ▶ wear uniform properly
 - ▶ use the “Buddy System”

Trench/Immersion Foot

- ▶ Potentially crippling, nonfreezing injury (temps from 50°F-32°F)
- ▶ Prolonged exposure of skin to moisture (12 or more hours, days)
- ▶ High risk during wet weather, in wet areas, or sweat accumulated in boots or gloves



Trench/Immersion Foot

▶ Symptoms

- ▶ initially appears wet, soggy, white, shriveled
- ▶ sensations of pins and needles, tingling, numbness, and then pain
- ▶ skin discoloration-red, bluish, or black
- ▶ becomes cold, swollen, and waxy appearance
- ▶ may develop blisters, open weeping or bleeding
- ▶ in extreme cases, flesh dies

Trench/Immersion Foot

- ▶ Treatment
 - ▶ prevent further exposure
 - ▶ dry carefully
 - ▶ DO NOT break blisters, apply lotions, massage, expose to heat, or allow to walk on injury
 - ▶ rewarm with body heat
 - ▶ clean and wrap loosely
 - ▶ elevate feet to reduce swelling
 - ▶ evacuate for medical treatment

Trench/Immersion Foot

▶ Prevention

- ▶ keep feet dry
- ▶ change socks at least every 8 hours or whenever wet and apply foot powder
- ▶ bring extra boots to field
- ▶ no blousing bands
- ▶ report all suspected cases to leadership

Dehydration

- ▶ A loss of body fluids to the point of slowing or preventing normal body functions
- ▶ Increases chance of becoming a cold weather casualty, esp hypothermia
- ▶ Can lead to heat cramps or heat exhaustion

Dehydration

▶ Symptoms

- ▶ dark urine
- ▶ headache
- ▶ dizziness, nausea
- ▶ weakness
- ▶ dry mouth, tongue, throat, lips
- ▶ lack of appetite
- ▶ stomach cramps or vomiting
- ▶ irritability
- ▶ decreased amount of urine being produced
- ▶ mental sluggishness
- ▶ increased or rapid heartbeat
- ▶ lethargic
- ▶ unconsciousness

Dehydration

- ▶ Treatment
 - ▶ drink WATER or other warm liquids
 - ▶ avoid caffeinated liquids (sodas, coffee, tea)
 - ▶ do not eat snow
 - ▶ rest

Dehydration

- ▶ Prevention

- ▶ drink minimum of 3 canteens of water daily for inactivity and 5-6 quarts for activity
- ▶ monitor urine color
- ▶ do not wait until you are thirsty
- ▶ drink hot liquids for warmth (non-caffeine)

Sunburn

- ▶ Burning of the skin due to overexposure to the sun and UV light
- ▶ Contributing factors
 - ▶ fair skin, light hair
 - ▶ exposed skin
 - ▶ reflective qualities of the snow
 - ▶ high altitudes
- ▶ Symptoms
 - ▶ redness of skin, slight swelling (1st deg)
 - ▶ prolonged exposure (2nd deg)
 - ▶ pain and blistering
 - ▶ chills, fever, headache

Sunburn

▶ Treatment

- ▶ soothing skin creams in mild cases
- ▶ in severe cases, seek medical attention
- ▶ aspirin for pain

▶ Prevention

- ▶ cover exposed skin with clothing
- ▶ sunscreen, lip balm
- ▶ limit exposure of skin to the environment

Carbon Monoxide Poisoning

- ▶ When oxygen in the body is replaced by carbon monoxide
 - ▶ colorless, odorless, tasteless gas resulting from incomplete combustion
- ▶ Inadequate ventilation from engines, stoves,



Carbon Monoxide Poisoning

▶ Symptoms

- ▶ headache
- ▶ dizziness
- ▶ weakness
- ▶ excessive yawning
- ▶ ringing in ears
- ▶ confusion
- ▶ nausea
- ▶ bright red lips, eyelids
- ▶ drowsiness
- ▶ unconsciousness
- ▶ possibly death

Carbon Monoxide Poisoning

- ▶ Treatment
 - ▶ move to fresh air immediately
 - ▶ seek medical aid promptly
 - ▶ provide mouth-to-mouth resuscitation if victim is not breathing

Carbon Monoxide Poisoning

▶ Prevention

- ▶ ensure proper ventilation
- ▶ don't use unvented heaters or engines
- ▶ ensure heaters are regularly serviced
- ▶ turn heaters off when not needed (during sleep)
- ▶ never sleep in vehicle with engine running
- ▶ never wrap poncho around vehicle exhaust to collect heat

Snow Blindness

- ▶ Inflammation and sensitivity of the eyes caused by ultraviolet rays of the sun reflected by the snow or ice

▶ Symptoms

- ▶ gritty feeling in eyes
- ▶ redness and tearing
- ▶ eye movement will cause pain
- ▶ headache

Snow Blindness

▶ Treatment

- ▶ **remove from sunlight**
- ▶ **blindfold both eyes or cover with cool, wet bandages**
- ▶ **seek medical attention**
- ▶ **recovery may take 2-3 days**

▶ Prevention

▶ **eye protection**

- ▶ **dark, UV protective glasses**
- ▶ **field expedient-cut narrow slits in MRE cardboard and tie around head**
- ▶ **do not wait for discomfort to begin**

Conclusion

- ▶ Dress properly
- ▶ Drink plenty of fluids
- ▶ Eat right
- ▶ Keep in shape
- ▶ Get plenty of rest
- ▶ Minimize periods of inactivity
- ▶ Maintain a positive attitude

**Safety is an instinctive priority
not an after thought!!**



“One Team One Fight”