

Medical Response in BC:

What can be done for injured forestry workers to save their lives?

Mike Kay ACP/ Flight Medic



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- **Who am I? Born in Chemainus on VI - small logging town and mill**
- **Relied on lumber**
- **47 years in EMS**
- **8 years Basic Life Support Paramedics Vancouver**
- **39 years ACP/ Flight Medic and still practicing currently pipeline jobs**
- **Instruct PCP ACP paramedics and SATECHS for Dept. of National Defence since 1989**
- **Also instruct tactical medicine to RCMP, Dept of Fisheries and and conservation officers**

Disclaimer

BCAS-WORKSAFE

- My presentation is based around current practices vs. what can we improve upon for the injured worker
- Based on 47 years of clinical experience, fact-based medicine, changes to industry and current medical practices as they apply to pre-hospital care and your industry

- WorkSafeBC requirements
- Kits and equipment
- OFA Level 3 training
- Backboards vs. Clamshells or Vacuum Backboards
- Hard collars (stiff neck) vs. protecting spine “do no harm” towel/horse collar objective “minimum movement of head and neck”

Medical Situations in the Field

Trauma vs. Medical

- Medical conditions - cardiac-respiratory - others (anaphylaxis's) etc.
- Traumatic injuries – lacerations – fractures - multi-trauma (TBI)
- Major issue access egress how do we get faller quickly to medical aid

BCAS Response

BLS/ALS

- Closest ground crew predominantly BLS
- Auto launch major trauma major/medical (ground response delayed) rural
- Most regions CCP via helicopter /fixed wing or rural with PCP(Prince Rupert)
- Other asset's SARTECHS out of Comox trained to PCP with advanced skills
- Fixed-wing sent with CCP to closest airport

What Can be Done Prior to Advanced Care?

A-B-Cs managed

- Once you have managed these - KEEP PATIENT WARM
- Confirm LZ or transport patient
- Time to tertiary care is critical

Hypothermia / Warmth in Trauma Austere Environments

- Normal 37 degrees
- Hypothermia <35 degrees cascade of clotting diminishes
- Ability to clot decreases dramatically once patient starts to become cold
- Treatment WARMTH blankets (Ready-heat blanket) ***

HEAT

READY-HEAT QUICK WARMING BLANKET

UP TO 8 HOURS OF HEAT



INSTRUCTIONS FOR USE

1. DO NOT open the outer protective package until ready to use.
2. Remove the blanket from the outer protective package and expose the Ready-Heat blanket to air. DO NOT open blanket pockets or inside pouch.
3. Blanket will start to heat immediately. Allow 10-15 minutes to reach operating temperature.
4. If heat decreases, expose blanket to air.
5. After use, dispose of blanket with regular waste. All natural ingredients; will not harm environment.



WARNINGS

Failure to follow these precautions may result in serious burns or other serious injuries.

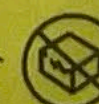
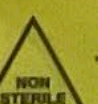
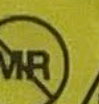
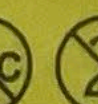
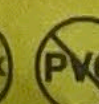
1. Careful supervision is required for use with the elderly, infants, children, people with sensitive skin and those who can't feel heat or regulate heat. Keep out of reach of children.
2. People with allergies, diabetes, frostbite, scars, open wounds or circulatory problems should consult a physician before using the Ready-Heat blanket.
3. **DO NOT use blanket on exposed skin.**
4. Remove immediately if blanket becomes too hot or if you feel uncomfortable. Maximum temperature may reach 125°F (52°C). DO NOT use while sleeping.
5. DO NOT open the sealed pockets or pouch and DO NOT allow the contents to contact mouth or eyes. If contact with skin or eyes, wash with clean water. Contents contain iron powder which, if swallowed, can be harmful. If contents are swallowed, immediately call a poison control center.
6. DO NOT fold the blanket or place objects on top of the blanket as folding or pressure maybe increase heat.

CONTENTS: Iron powder, water, activated carbon, wood powder, salt and polyethylene foam



TechTrade

TechTrade LLC ▪ 30 Montgomery Street ▪ Suite 690 ▪ Jersey City, NJ 07302
1-866-491-TECH ▪ Fax: 201-706-8131 ▪ info@techtradellc.com ▪ www.ready-heat.com



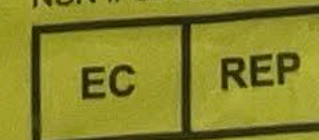
MADE IN USA



0473



CLEARED



EMERGO EUROPE
Proessingracht 20
2514 AP The Hague
The Netherlands

SIZE: 34" x 48" (86 cm x 122 cm)
PART# G12RH2
WEIGHT: 1.5 lbs. (794 gm)
NSN # 6532-01-538-0759



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C-spine Rules & *Pelvic binding*

Pelvic Binding – Why?

Largest amount of vessels in the body people bleed out

- Multiple C-spine rules
- Canadian C-spine rules validated clinically
- Nexus validated clinically
- ITLS C-spine rule's similar to Canadian and NEXUS
- BCAS Guidelines around C-spine management
- “German C-spine rules in major trauma
- WCB training
- VSBs *****

C-spine insult

- NEXUS rules 99% accurate
- Canadian C-spine rules validated
- 65 studies 28,200 patients
- 3.7% had C-spine fracture of that < 1% had deficit
- Based off above German rules in major trauma more focus on pt

Issues with Backboards

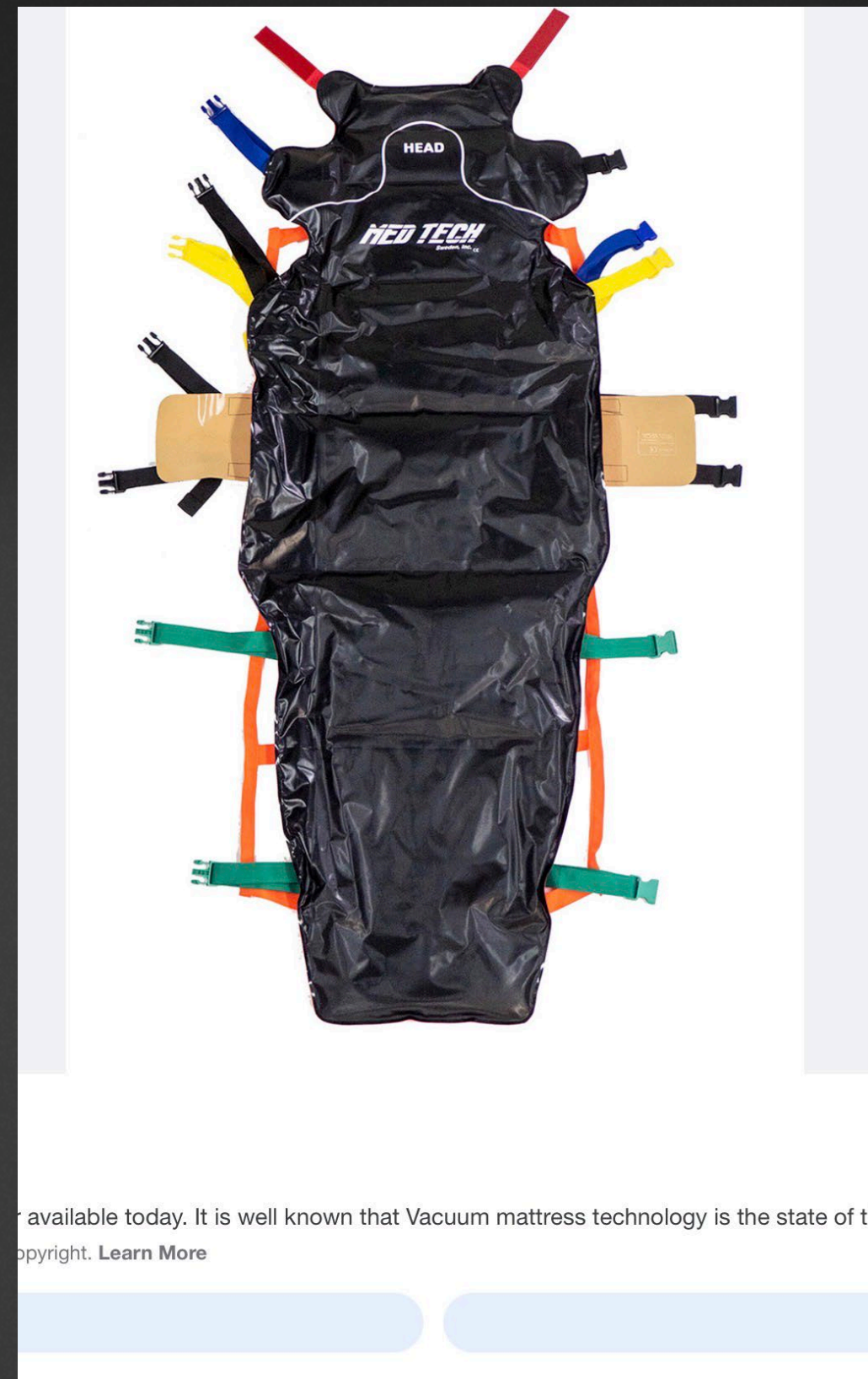
Decubitus ulcers start to form in 20-30 minutes causing debilitating lesions

**Better Options:
Vacuum backboard or clamshell**

VSB

Current standard pre-hospital moving toward

- One model



available today. It is well known that Vacuum mattress technology is the state of the art. Copyright. Learn More

BCAS Air Bases

- VI Parksville - 1 rotor | 1 ground crew
- Vancouver - 2 rotor | 5 ground crews multiple fixed wing assets
- Kamloops - 1 rotor wing
- Kelowna - 1 rotor wing plus fixed wing
- Prince George - on call contract rotor wing
- Prince Rupert (BLS) - 1 rotor wing
- Port McNeil (BLS) - 1 rotor wing one of busiest
- Williams Lake - 1 contract rotor wing
- Alberta (STARS) - mixed asserts
- Private TEAAMS



908

RESCUE
SAUVETAGE

Canadian Forces
Forces Canadiennes

Canada

Private Contractors “Air”

You should know your aerodrome (where you work)

Valley Helicopters Hope BC

TEAAMS Squamish corridor / Sunshine Coast

Whistler / Pemberton

100 Mile / Williams Lake

Kootneys (Stars) Alberta

Call 911 BCEHS

Types of Extraction

- Belly Carry
- Basket
- Sked
- Litter
- HETS (hoist)
- Aircraft 206/222/406/S76
Cormorant etc. You likely won't
know what's coming to you.
- Type of aircraft affects extraction
point. Packaging and treatments
during flight.



Volunteer SAR or JRCC?

Call 911 - let them find the appropriate resource

Throughout the province – these options are generally very qualified and trained especially if hoist extrication required

Generally there is a delayed response as they are volunteers (2-4 hours)

Consider JRCC (Joint Rescue Coordination Centre) but the ultimate responsibility falls to BCEHS

Questions?

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