

APRIL 2018



PEAK PERFORMANCE FOR THE OCCUPATIONAL ATHLETE

MED-I-WELL SERVICES

Innovative Health and Wellness Solutions



MED-I-WELL SERVICES

Founded in 1998, Med-I-Well Services delivers sustainable drug benefit management programs, comprehensive corporate and industrial wellness programs, and corporate fatigue risk management programs to assist organizations with cost savings while improving their employees' health, safety, and productivity.

PEAK PERFORMANCE TRAINERS



KRISTINA VAN LANKVELT

BSc Exercise Science
Masters in Public Health

Canadian National Volleyball
Team

ACSM Personal Trainer
Certified Life Coach



EMILY TETZLAFF

BPHE Health Promotion
Masters in Human Kinetics

Laurentian Varsity Women's
Cross-Country Running

ACSM Personal Trainer

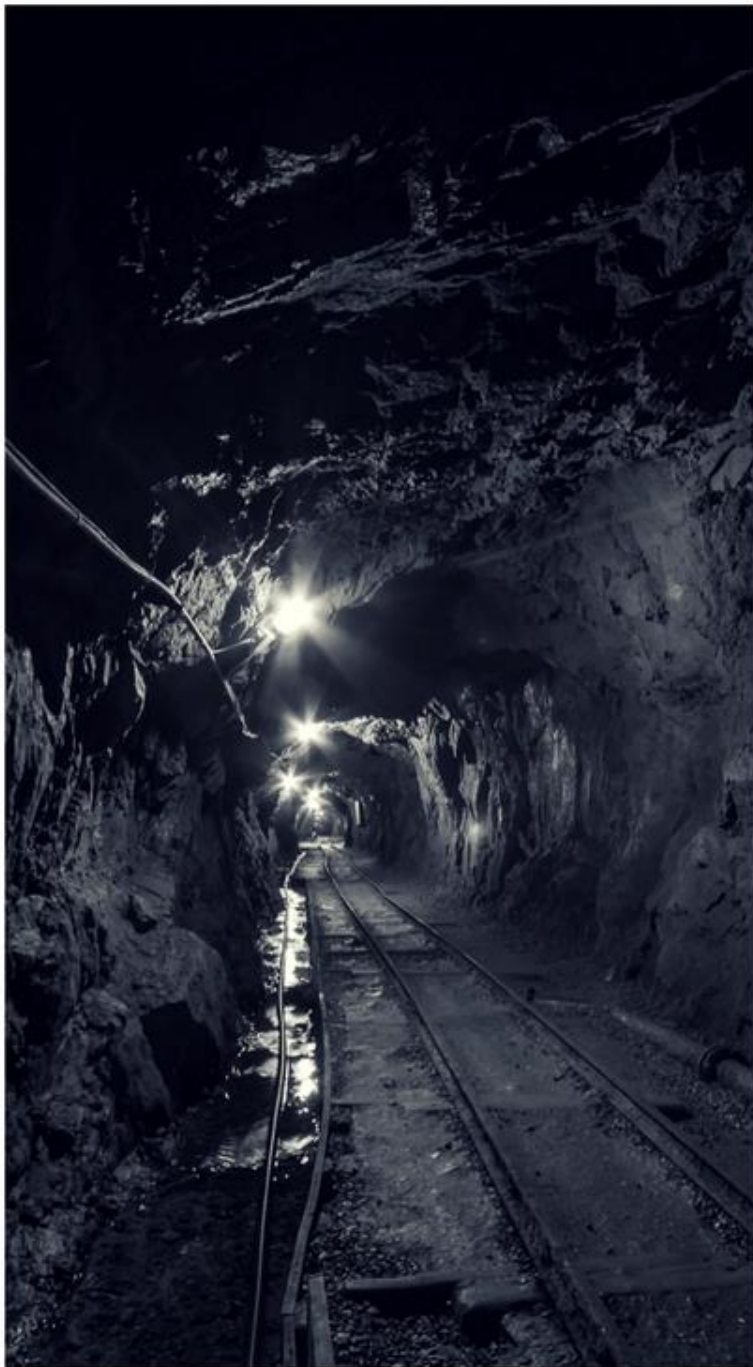


TOON VAN LANKVELT

BA Psychology

12 year professional Volleyball
career & Canadian Olympic
Team Alternate

Red Cross First Responder



INDEX

- 01. Occupational Athletes
- 02. Peak Performance Training
- 03. Mine Rescue & Smelter Response
- 04. Implications
- 05. Future of the Program

WHAT IS AN OCCUPATIONAL ATHLETE



HOW DO ATHLETES PREPARE?

There are many similarities between emergency preparedness and how professional athletes prepare for success on the field.

1. YOUR LIFESTYLE MUST REFLECT YOUR OVERALL GOALS.

Consistently eat healthy, hydrate properly, achieve optimal sleep and be mentally and physically fit.

2. TRAIN YOUR BODY SPECIFIC TO THE DEMANDS.

Improve your strength, mobility, reactivity and safety.

3. ENGAGE IN MENTAL TRAINING.

To achieve peak performance, reduce your stress response, reach flow state and react automatically.



ASK YOURSELF

“Am I prepared to achieve peak performance?”

CURRENT PHYSICAL TRAINING PRACTICES



MUSCULAR STRENGTH

35% Mine Rescue
33% Smelter Rescue

STRETCHING

9% Mine Rescue
8% Smelter Rescue

CARDIOVASCULAR

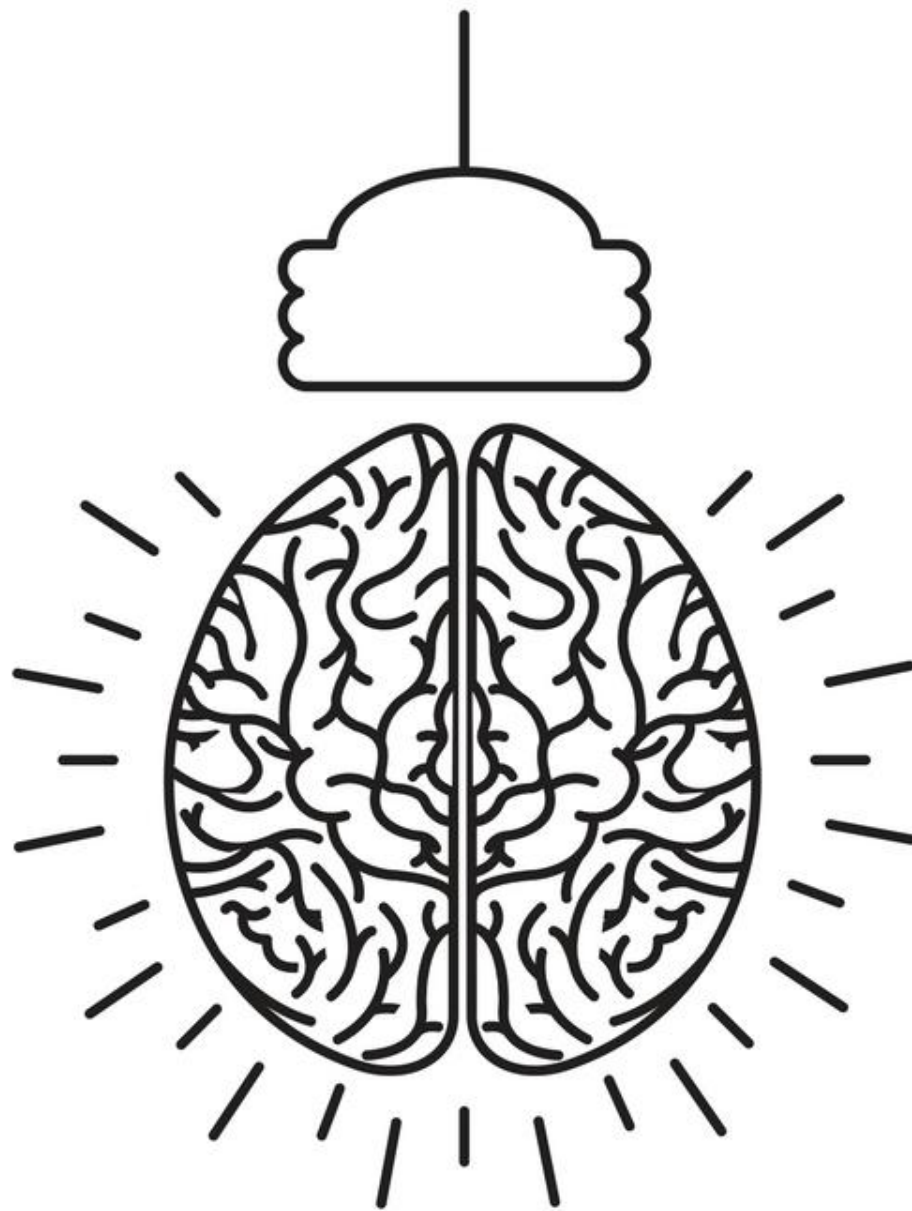
50% Mine Rescue
42% Smelter Rescue

BALANCE & STABILITY

7% Mine Rescue
4% Smelter Rescue

MUSCULAR ENDURANCE

16% Mine Rescue
25% Smelter Rescue



MEDITATION

4% Mine Rescue
25% Smelter Rescue

BREATHING

22% Mine Rescue
29% Smelter Rescue

SIMULATION

9% Mine Rescue
4% Smelter Rescue

SELF-TALK

9% Mine Rescue
17% Smelter Rescue

VISUALIZATION

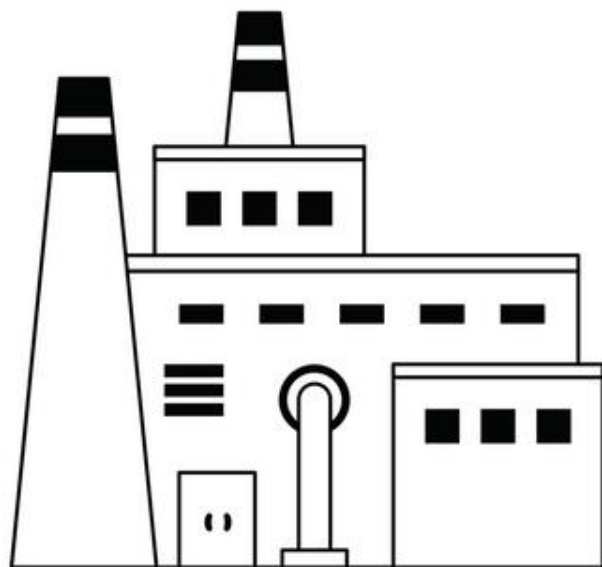
7% Mine Rescue
21% Smelter Rescue

CURRENT MENTAL TRAINING PRACTICES



87%

MINE RESCUERS



92%

SMELTER RESCUERS

had never heard the term occupational athlete



PHYSICAL TRAINING



MENTAL TRAINING



LIFESTYLE COACHING





MINE RESCUE

65 MEN | 3 WOMEN

10 x 1.5 hour sessions
5 companies
<1-27 years of experience
18-58 years of age

SMELTER RESCUE

24 MEN

2 x 3 hour sessions
1 company
<1-11 years of experience
25-55 years of age



PHYSICAL TRAINING

TRADITIONAL TRAINING

Exercises that isolate joints and muscles are training muscles, not movements, which results in less functional improvement.



FUNCTIONAL TRAINING

Exercises that use complete muscle activation against a resistance and a purposeful movement pattern which allows for maximum strength gains.



FUNCTIONAL TRAINING COMPONENTS

1

CORE STRENGTH

Confined space & injury prevention core work.

2

GRIP & FOREARM STRENGTH

Task specific strengthening for basket carry, pulley systems, and lifting technique.

3

STRETCHING

Preventing musculoskeletal disorders, warming-up and cooling down pre- and post-training.

4

PRE-HABILITATION EXERCISES

Preventing injuries, correcting dysfunctions, restoring biomechanics, optimizing movement and improving performance.



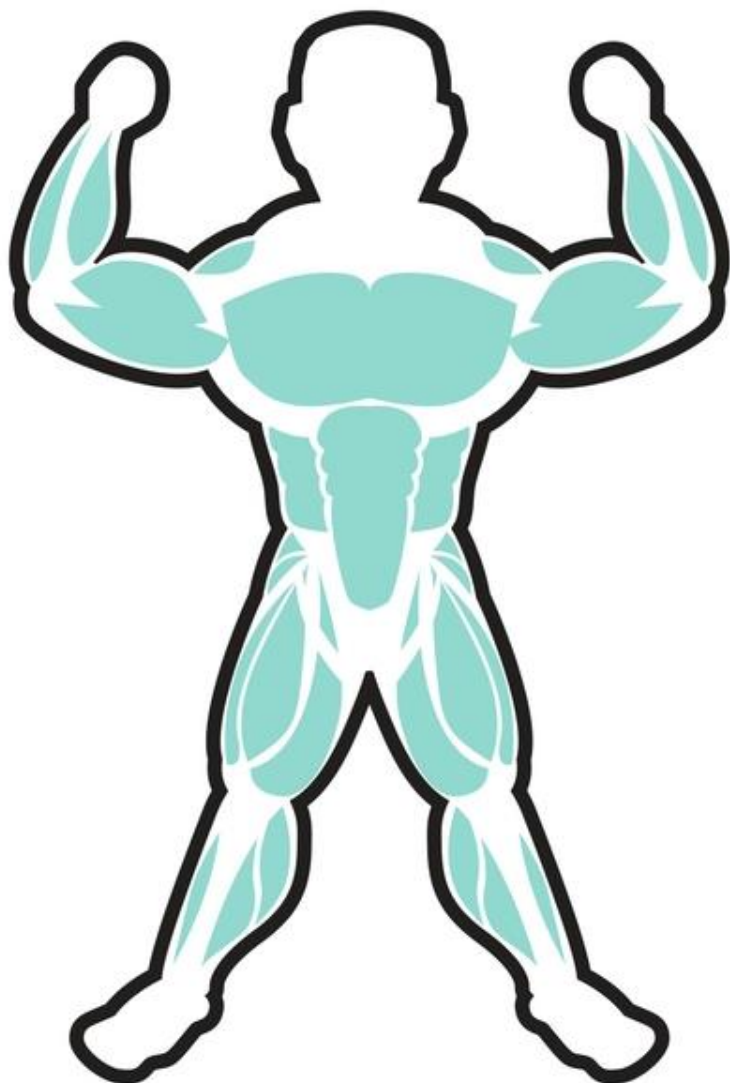
PRIORITY PHYSICAL TRAINING PRACTICES

FOREARM STRENGTH

19% Mine Rescue
21% Smelter Rescue

GRIP STRENGTH

37% Mine Rescue
33% Smelter Rescue



LOW-BACK STRENGTH

31% Mine Rescue
83% Smelter Rescue

CORE STRENGTH

32% Mine Rescue
75% Smelter Rescue

FINE MOTOR SKILLS

13% Smelter Rescue

INCLINE WALKING

46% Mine Rescue



MENTAL TRAINING

VISUALIZATION IS THE ABILITY TO

***"See first hand with your mind,
then with your eyes, and finally
with your body"***

MASTER SWORDSMAN YAGYU MUNENORI

MENTAL TRAINING COMPONENTS

1

FLOW STATE

Learning about your personal "in the zone" state.

2

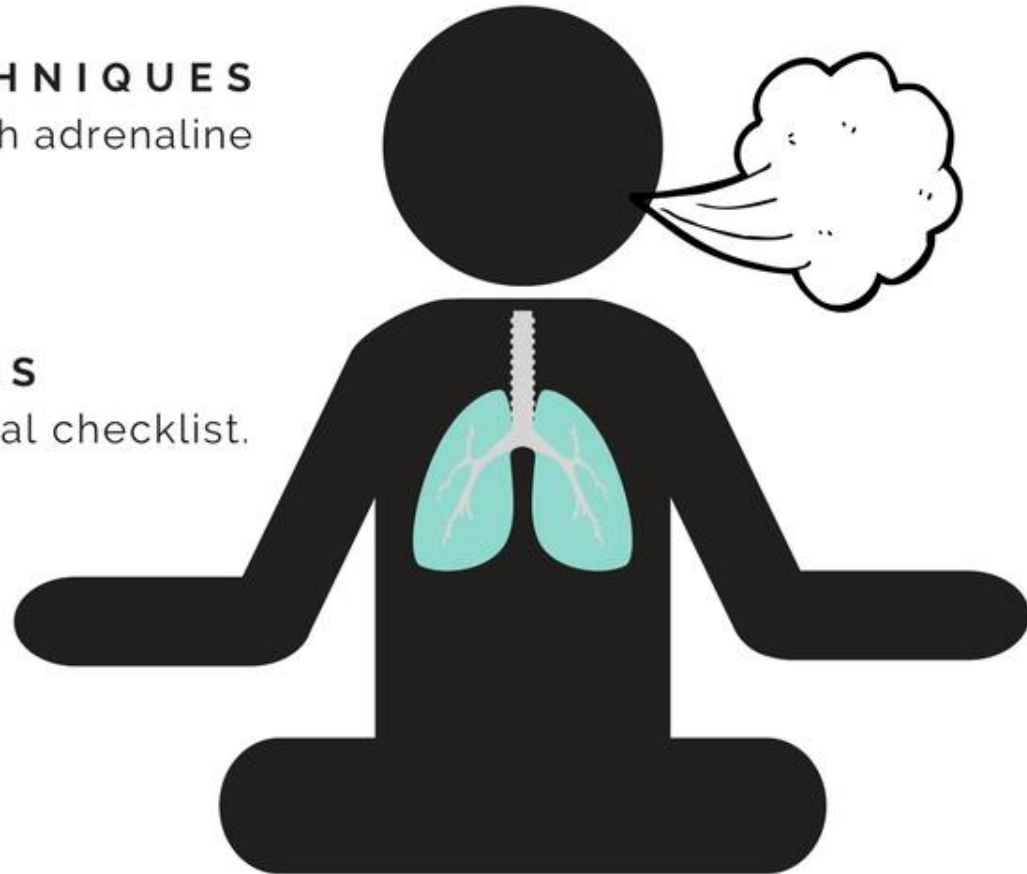
BREATHING TECHNIQUES

Using your breath in high adrenaline states.

3

SELF-AWARENESS

Creating your own mental checklist.



"AN ASTRONAUT'S GUIDE TO LIFE"

Feeling ready to do something doesn't mean feeling certain you'll succeed, though of course that's what you're hoping to do. Truly being ready means understanding what could go wrong and having a plan to deal with it.

Chris Hadfield

COMBATING NEGATIVE SELF-TALK

10% Mine Rescue
42% Smelter Rescue

HIGH-ADRENALINE CONTROL

19% Mine Rescue
46% Smelter Rescue

PRIORITY MENTAL TRAINING PRACTICES

POST-RESCUE

18% Mine Rescue
71% Smelter Rescue

PRE-CALL ANXIETY

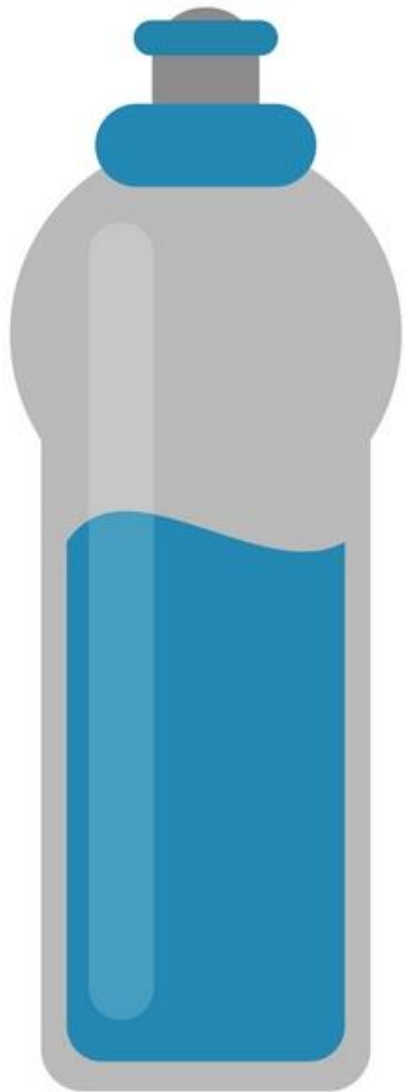
18% Mine Rescue
38% Smelter Rescue

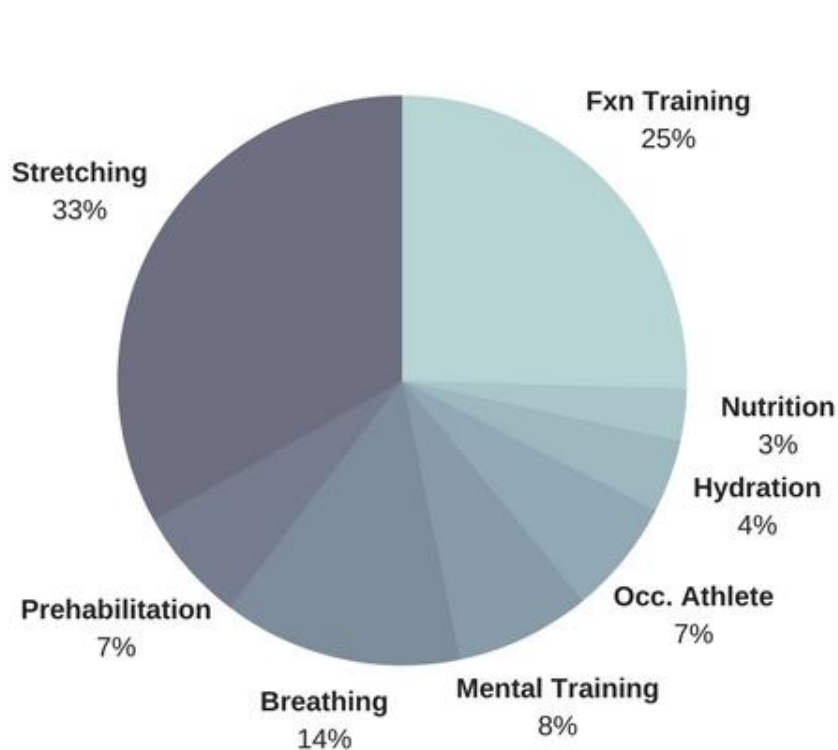
MENTAL ENDURANCE

22% Mine Rescue
33% Smelter Rescue



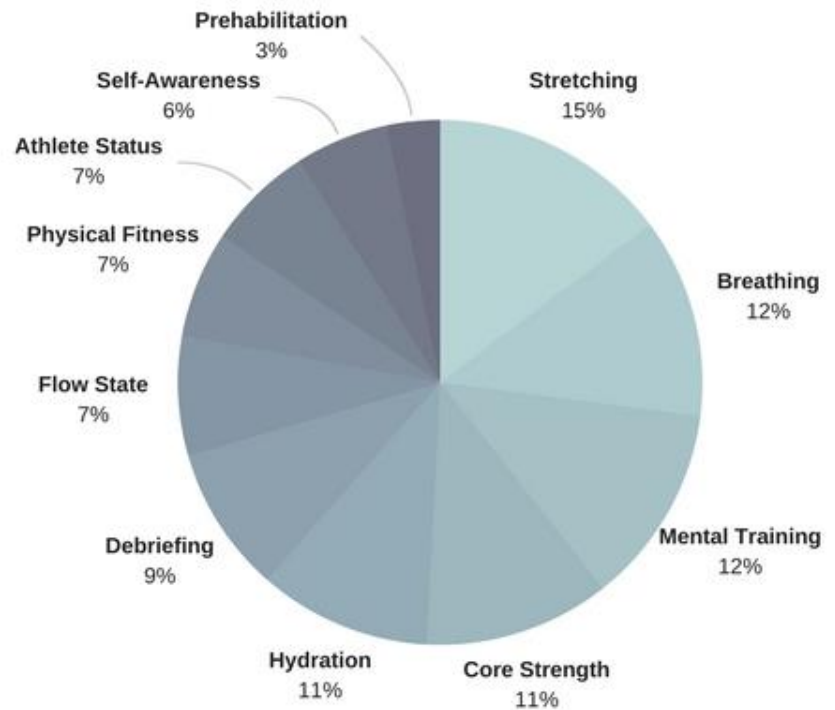
LIFESTYLE COACHING





MINE RESCUERS

STRETCHING | FUNCTIONAL
TRAINING | BREATHING



SMELTER RESCUERS

STRETCHING | MENTAL
TRAINING | BREATHING



DURATION

MINE

28% longer than
an hour

66% one hour

SMELTER

46% longer than
an hour

33% one hour



FREQUENCY

MINE

93% bi-monthly
sessions

SMELTER

50% quarterly
29% all sessions
13% once a year

**90% of participants that are on their sites
competition team would like **additional**
sessions.*

SMELTER RESCUERS MINE RESCUERS

99%

found the training impactful and informative



100%

found the training impactful and informative

92%

were interested in additional training sessions



100%

were interested in additional training sessions

100%

found the training practical and hands-on



100%

found the training practical and hands-on

100%

found the trainers competent and prepared



100%

found the trainers competent and prepared

*Very informative
and friendly -
well worth the
time*

*Fantastic idea!
Great
opportunity to
stay healthy
and safe*

*Awesome -
very valuable*

*I believe these
sessions
should be
mandatory*

*This was
great!*

*Very much
needed in
mining and
mine rescue*

*The training was
great for
teaching self-
awareness*

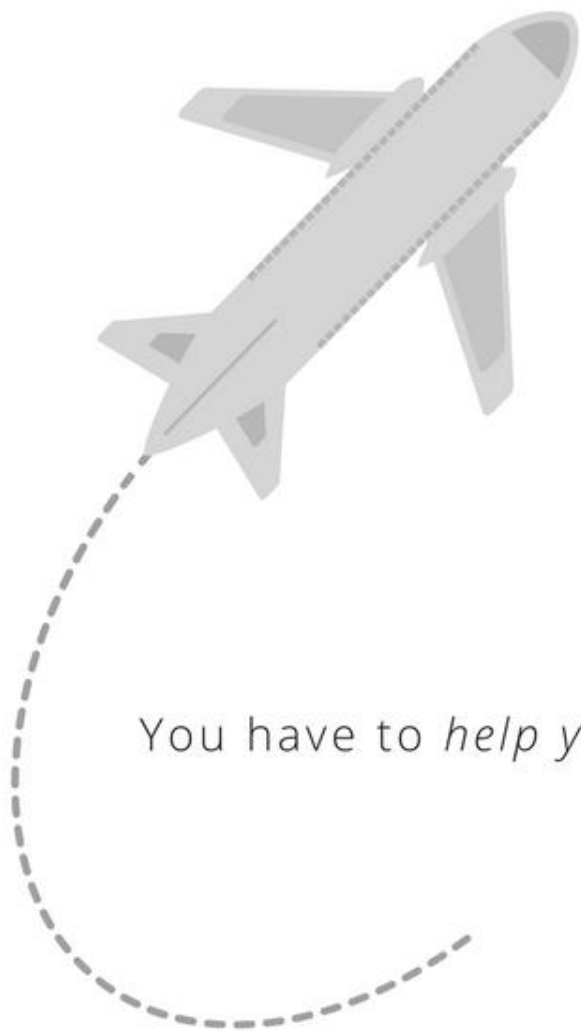
*Very informative
- good reminder
that exercising
and stretching is
essential*



"AN ASTRONAUT'S GUIDE TO LIFE"

Nothing boosts confidence quite like simulating a disaster, engaging with it fully, both physically and intellectually, and realizing you have the ability to work the problem. Each time you manage to do that your comfort zone expands a little, so if you ever face that particular problem in real life, you're able to think clearly.

Chris Hadfield



ASK YOURSELF

**On an airplane,
who's oxygen mask
do you put on first?**

You have to *help yourself*, before you can help those around you.



THANK YOU!

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Acknowledgements:

SUDBURY
INTEGRATED NICKEL
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