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# Presentation for you today.

- "Here and now" dangers for firefighters.

- "Long term" health for firefighters.

- Focus on CO, psychological health, cancer.



# Building fires tests to flashover.

30 years ago: 15 min.

Today: 3 min.

## More toxics gases.





"Here and now" safety. -just a few...

- Building collapse.
- Burns- and heat stress.
- CO damage on heart and brain.
- Explosions.
- Too few firefighters on the scene.



## "Here and now" safety. –prevention...

- Knowledge and education.
- Training, training and training.
- The best safety equipment and Personal Protective Gear.
- No cut downs on staff... Add resources.



# Help firefighters to safe life.

What's good for firefighters is good for citizens

# Make NO mistake about that...



# "Long terms" health.

- Heart problems.
- Brain damage.
- Psychological and mental problems such as PTSD, depression, burnout etc.
- Cancers.



# CO damage on heart and brain.

- 22.000.000 people world wide.
- 75-80% firefighters.
- Wrong diagnoses.
- Looks like stroke and/or embolism.
- From all fires and off gassing.



# Spot it.

- Headache from ear to ear and neck.
- Gray color. Pail.
- Disoriented.
- Lose consciousness.



# No action.

- Like stroke.
- Loss of memory.
- Speech difficulties.
- Symptoms occurs within 48 hours.
- No treatment = too late.



# What to do.

- ALWAYS oxygen therapy in pressure tank.

- Within four hours.



Psychologic damages.

- PTSD.: 17 30% firefighters show symptoms.
- Anxiety disorder: 20 23% in ambulance personal.
- Clinical depression: 8 21% in both groups.



# Why?

- Nature og the job.
- Culture in the organization.
- Lack of recognition and backup from the leadership within the organization.



# What to do for prevention.

- Change of attitude in the organization. (Not on the scene).
- Make systems to psychologic defusing and debrifing.
- Make it ok to talk about how you feel.
- We are all the same. Brothers and sisters.



## Cancer

# Cancers kills more firefighters than actually "death in the line of duty".





# Why?

- Work at night.
- Chemical cocktail.
- Personal Protective Gear.
- Psychological health.

Not avoidable 100%



# CARCINOGENS from all fires.

- Benzene
- PAH's -Polycyclic Aromatic Hydro Carbons
- Diesel Particulates
- Formaldehyde
- Dioxin
- Sod
- (Asbestos)



# How?

- Absorption through breathing.
- Absorption through the skin.
- Contaminated gear.
- Contaminated fire station.



Ocopational risk.

- No protection is 100%
- Clean all gear. Make procedures.
- Clean fire house. Clean and "not" clean areas.
- Healthy living.







# Legislation.

#### PRIMARY SITE CANCERS

# - Politicians.

- Canada.
- USA.
- Australia.



#### MINIMUM PERIOD OF REGULAR EXPOSURE TO THE HAZARDS OF A FIRE SCENE

Primary leukemia	5 years
Primary site brain cancer	10 years
Primary site bladder cancer	15 years
Primary site lung cancer in non-smokers	15 years
Primary site ureter cancer	15 years
Primary site kidney cancer	20 years
Primary site colorectal cancer	20 years
Primary site testicular cancer	20 years
Primary site esophageal cancer	25 years
A primary non-Hodgkin's lymphoma	20 years
A primary site prostate cancer	15 years
A primary site skin cancer	15 years
A primary site breast cancer	10 years
Multiple myeloma	15 years
1 2	

AR 102/2003 s2;249/2005;74/2010;73/2011

# Who is the first in Europe?

- Lithurania?
- Germany?
- France?
- Sweden?
- Denmark?







# Help firefighters to safe life.

What's good for firefighters is good for citizens

# Make NO mistake about that...



# Firefighters cooperate

- In Nordic countries.









- In European countries.









# Help firefighters to safe life. What's good for firefighters is good for citizens Make NO mistake about that...

## Thank you





