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**GOALS TODAY**

- Educate you on topics of firefighter health and wellness
- Inspire you to work with your organization to make positive changes
- Challenge you to improve the health and save the lives of our firefighters

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**THE ISSUES**

The occupation of firefighter has inherent risks

- Physical
- Mental
- Immediate and life long

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Many risks are identifiable:

- Musculoskeletal injuries
- Infectious diseases
- Psychological trauma
- Medical problems - increased risk for cancer and heart disease

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**BARRIERS TO  
TREATMENT NEED TO  
BE ELIMINATED.**

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In this talk we will address these issues using 4 different case scenarios

- Neck/back/shoulder injuries
- Influenza
- PTSD (post traumatic stress disorder)
- Select cancers and heart problems

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Remember this: All stakeholders benefit from a healthier work force

- Firefighters
- Their families
- The employer
- The community (taxpayers)
- Fire commissioners

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**Today's game plan:**

- All important stuff is in the handout
- Key references are attached as exhibits
- "Healthy In, Healthy Out" Booklet
- Q&A will be after each of the 4 segments, so please hold questions
- I hope this will stimulate dialogue - **leading to action** - between all parties!

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**CASE SCENARIO #1**  
"Chief, I think I hurt my back"



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Causes Include:  
Heavy loads



"supersize them fries!"

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**Causes Include:**  
Poor body mechanics  
(gurney vs. stairs)



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**Causes Include:**  
Inadequate training in body mechanics



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**Causes Include:**  
Aging/deconditioned work force



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**Common Problems:**  
Neck/back/shoulder injuries often occur together - “The Trifecta”

- Strains/sprains
- Disk injuries
- Fractures/dislocations

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**Solutions:**  
Identify competent medical providers

- MD/DO/?DC
- PT (physical therapist)



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**Solutions:**  
Encourage and teach fitness and good body mechanics throughout the career



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Solutions:  
Engineer fixes -  
power gurney,  
stair chair



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Solutions:  
Effective rehab



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Solutions:  
Potential value of the interval  
physical exam - when done  
regularly and thoroughly



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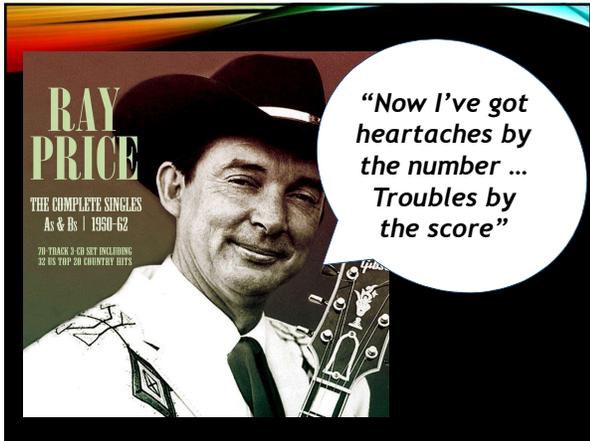
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***A note on heartaches***  
 LOD deaths from cardiac events are at least 40x higher while fighting a fire . . . And greater than 50% of LOD deaths, so . .

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***. . . Heartaches***  
 Do you screen your firefighters periodically as they age (exercise treadmill test)?


 A small inset photograph shows a firefighter in blue gear running on a treadmill in a clinical or gym setting. A medical professional in a white coat stands by the treadmill, monitoring the firefighter's health.

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*. . . Heartaches*  
Is your rehab unit effective?

A photograph showing several firefighters in full gear standing around a stretcher with a patient on it, positioned next to a fire truck. The scene is outdoors with trees in the background.

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*. . . Heartaches*  
Is your workforce trained in maintaining optimal heart health?

A 3D illustration of a red heart with small legs, holding a dumbbell. The heart is positioned as if it is exercising.

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**PLEASE DON'T**

A photograph of a young girl with her hands raised in the air, looking upwards. The image is framed with a black border and overlaid with text.

**ASK QUESTIONS**

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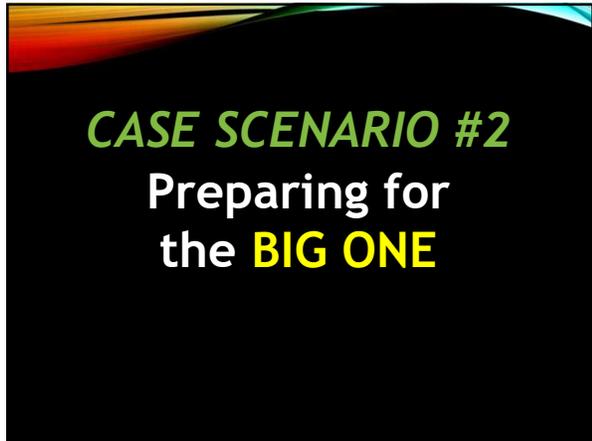
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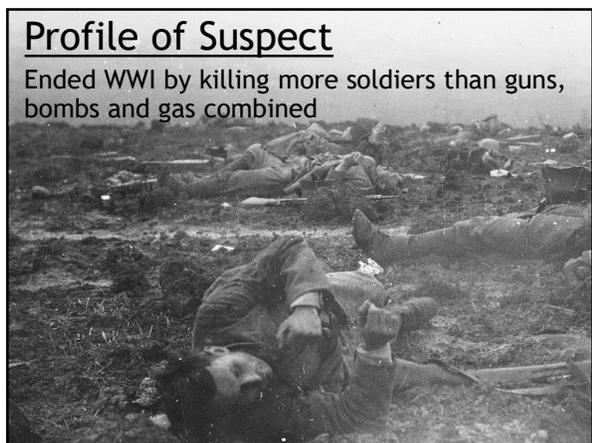
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Profile of Suspect:  
Worse risk than any earthquake



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Profile of Suspect:  
It's **pandemic influenza**  
(think epidemic on steroids!)



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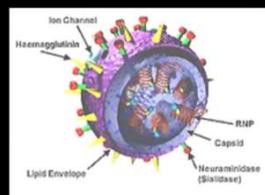
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Disaster Scenario:  
**FLU APOCALYPSE**

New strain



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Disaster Scenario:  
Deadly with rapid spread worldwide



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Disaster Scenario:  
Resources overwhelmed



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Disaster Scenario:  
High mortality rate



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**Flu Basics:**

- Categorized by H (hemagglutinin) and N (neuraminidase) designations
- Impact on human disease is a function of **transmissibility** and **lethality**
- Virus is constantly mutating (changing) contributing to decreased vaccine effectiveness
- Tamiflu is marginally effective and may be completely ineffective in the future

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**Flu Prevention:**

- Vaccine - safe but variably effective
- Routine precautions
- Pandemic precautions

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**Key Points:**

- Have protocols in place consistent with OSHA/CDC/State
- Train staff in protocols - use of medical protective gear requires practice!



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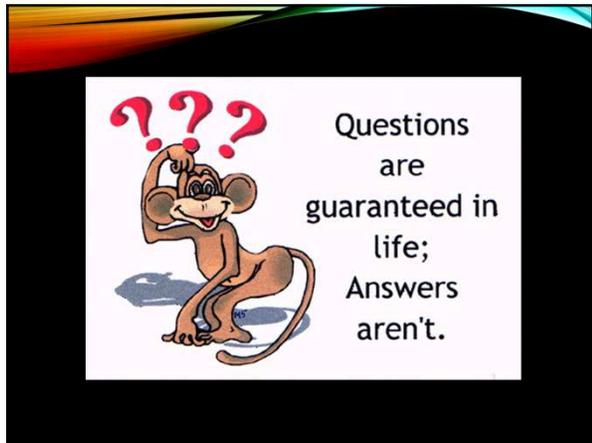
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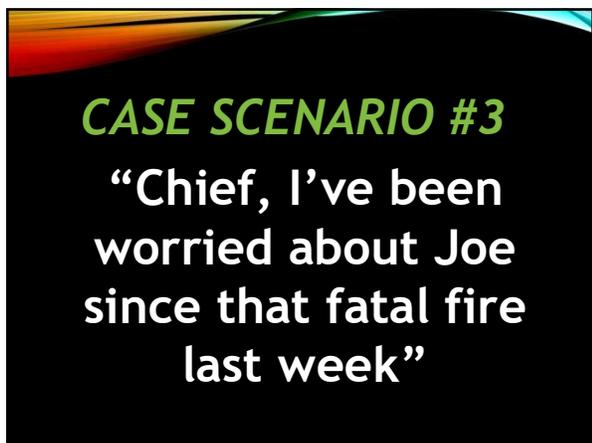
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**Definitions:**  
**PTSD (post traumatic stress disorder)**  
Psychological distress caused by a single incident or repeated exposures to physical, emotional or spiritual trauma

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**Problems:**  
Short term effects often cause change in work patterns, sleep, and interpersonal relationships



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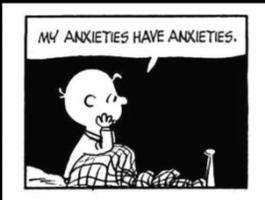
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**Problems:**  
Common complaints include bad dreams, flashbacks, and anxiety/depression



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Problems:  
If untreated, **suicide** is a real risk



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Problems:

- PTSD and depression rate is 5X that of civilians
- Suicide deaths may actually exceed all other LOD deaths **combined**

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Solutions:  
*What can be done?*

Change the culture in the workplace - “we all got it to some degree”

**Get PTSD out of the closet!**

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**Solutions:**  
Protect employees from fear of discipline or termination for addressing PTSD

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**Solutions:**  
Peer counseling as a frontline resource

- Having peers nominate other peers (as opposed to self or Chief selection) improves participation
- Training and certification needed to address legal confidentiality issues

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**Solutions:**  
Effective EAP as next step - need competent psychological resources



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Consequences of unrecognized/untreated PTSD may include:

- Poor job performance
- Strained inter-personal relationships
- Substance abuse
- Suicide

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**SEE EXHIBITS B1-B5**

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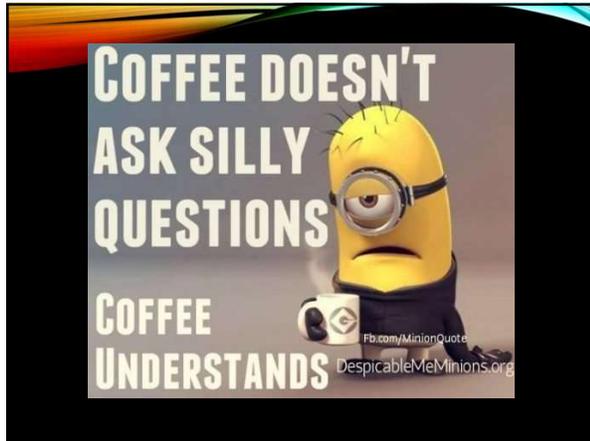
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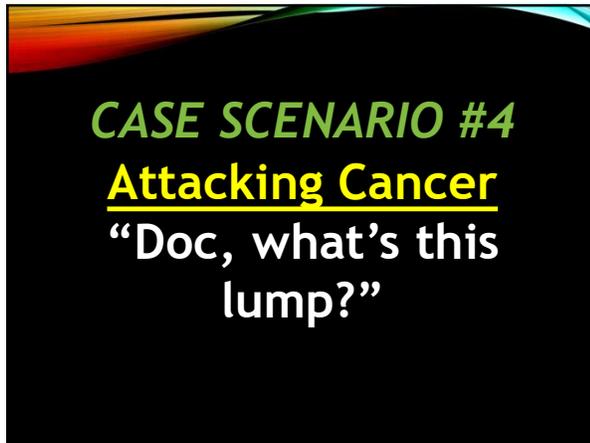
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Optimize lifestyle risk factors:

- Diet, exercise, smoking/chewing, etc.
- Example: few non-smokers get lung cancer

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Concept: **Primary Prevention**

- Reduce risk of a cancer using lifestyle choices
- Utilize your competent medical provider and regular exams for education and screening

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Concept: **Secondary Prevention**

- Find cancer early using screening tests = better chance of cure
- Examples: mammogram/breast, colonoscopy/colorectal, PSA/prostate

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**Concept: Toxic Exposure**

- Multiple substances
- Variable lethality
- Exposure limits uncertain
- Can be absorbed through lungs, skin, GI tract, mucous membranes
- Need to maximize barrier protection (PPE)
- Good decontamination protocols are essential, also cleaning and disinfecting

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**Medical Screening:**

- Thorough medical screening exams and testing are necessary
- Consider **mandated** exams and a disability “safety net”

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Medical Screening:  
A competent medical provider is crucial



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Medical Screening:  
Your medical provider must understand firefighters are at higher risk for certain cancers and **standard screening recommendations do not apply to this group!**

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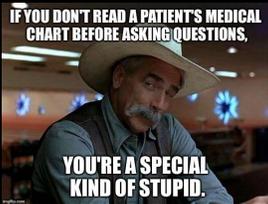
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Medical Screening:  
Educate your medical providers with a succinct cover letter



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Medical Screening:  
Provide your medical providers with appropriate history/physical exam/fit-for-duty forms



A cartoon illustration of a doctor in a white coat and cap asking a patient, "WHERE DOES IT HURT?". The patient is a bald man in a yellow shirt and blue pants, looking slightly uncomfortable. The doctor is holding a clipboard and a pen. The scene is set in a simple, clean environment.

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Medical Screening:  
Provide a **job analysis** for Firefighter/EMT when requesting a fit-for-duty determination

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**SEE EXHIBITS C1-C4**

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Summary:

- Healthy firefighters are an **asset** to themselves, their families, their departments and the public
- Goal is to get every firefighter into a long, healthy retirement
- Post-career monitoring is essential for long term risks like most cancers

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**SEE EXHIBITS D1-D3  
and *Healthy In,  
Healthy Out* booklet**

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Metrics to Monitor:

- LOD Death/Disability
- Workers Comp Claims
- Absences (*Job-Related & Non Job- Related*)
- Group Insurance Costs

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**THANK YOU AND CARRY ON!**

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**There are no stupid questions.**

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