

Before

After FRF



# Functional Fitness for the Fire Service

Presented by:

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# **Aaron Zamzow (ZAM)**

- Firefighter and Training Officer for the City of Madison, WI Fire Department. Firefighter/ EMT for over 20 years.
- Certified (NASM, Ace Peer Fitness, NSCA CSCS, PN1) and degreed Personal Fitness Trainer with 30 years experience.
- Trained with elite athletes for the NBA, NHL, and NFL and had the privilege to study under some of the top trainers in the world.
- Owner of Fire Rescue Fitness
- Contributing Writer for Firehouse Magazine (Expo and World), Lexipol, FR1...
- Thank YOU!





## What we want to learn today.

- Define "functional fitness" for the fire service?
- The Essential Components of a Fire Rescue Workout Program
- Workout Templates
- How to Schedule/ Plan Workouts (weekly)
- Q and A (equipment, nutrition, assessments, trends)
- FYI- www.FireRescueFitness.com/Firehouse



## **BENEFITS OF FUNCTIONAL FITNESS**

- Injury Reduction/Performance Improvement
  - Weight control
  - Lower instances of Cancer
- Decrease chances of sudden heart attack and stoke.
  - Improves cognitive thinking
- Improves mental health (lowers symptoms of depression)
  - Helps manage PTSD
  - Improves Cognitive Thinking
  - Improves immune response (COVID)

\*\* Brain, Behavior, and Immunity Volume 61, March 2017, Pages 60-68



## What is Functional Training?

"Training the body for the activities performed in daily life".
-Mayo Clinic

# Our Playing Ground "daily life"

Firefighting/ EMS is strenuous work!











## **Fire/Rescue Ground Motions**

- Lifting
- Crawling
- Pulling
- Hoisting
- Carrying
- Dragging
- Climbing
- Slamming (sledge)
- "Core" Work







#### What is Functional?



# JIF YOU HAVE A BODY, YOU ARE AN ATHLETE."

-BILL BOWERMAN





"Being a fire rescue athlete is a state of mind, which is not bound by age, rank, or situation. You must be physically and mentally ready to perform regardless of your playing field."

--Aaron "ZAM" Zamzow



# Do the exercises in your workout mimic and/or help you do your job more efficient and effectively?

# What is "Functional" Fitness

- Marathon/Ironman?
- CrossFit?
- P90X, Insanity?
- GET HUGE Bro-tein Program?
- How much do you bench?
- 7-minute Abs?
- Zumba?
- Yoga?









# How much do you bench...?

Many of the traditional weight-lifting machines seen in most firehouses do not "functionally" address the physical challenges fire rescue athletes need.....





# Is this an effective exercise?





#### THIS IS "Functional"...

The main goal of a firefighter, EMT and/or medics workout should be to improve performance (fire/rescue ground movements), reduce injuries, and promote career longevity.

### 1. Have a Plan

- Develop a training base
- Increase intensity with time and skill development.



## 2. You must work your core.

 During a career, almost 50% of all fire rescue athletes will hurt their back while on duty.



### 3. Have some heart.

- Not just running or biking...
- Intervals are one of the best ways to simulate the high level of fitness required on the fire ground







## 4. Full-body Exercise.

- Functional strength exercises increase balance around the joints and helps prevent injuries by stimulating stabilizing muscles.
- We DO NOT Isolate muscles on the fire/rescue ground



## 5. Warm-up and Be Mobile.

- Dynamic warm-up before workouts and trainings.
- <u>The more flexible...the more efficient the movement.</u>

#### **Spiderman Steps**



**Step Ups** 



**Reach and Rotate** 



### 6. RECOVER

- Stretch, foam roll, yoga, sleep, nutrition, hydration, stress
- Take a 10-minute break (deep breathing)







# Essential Components of a Firefighter Workout.

- 1. Have a Plan
- 2. You MUST work your Core
- 3. Have Some Heart-Intervals
- 4. Be Full-body Functional
- 5. Warm-up and Be Flexible (foam rollers)
- 6. Understand RECOVERY





## **The Anatomy of a Functional Workout**

- Active warm-up (3-4 exercises)
- Core Training and prehab (3-4 exercises)
- Strength Training (8 exercises)
- Interval Overhauls (5 movements)
  - Use an interval timer
- Stretch and foam roll (5 minutes)













# The Anatomy of a Crew Workout

- Active warm-up (4-6 exercises)
- Fire Ground/ Strength/ Core Movements
  - Circuits of 6 or 8 exercises (30 seconds work/rest)
  - 3 or 4 rounds (24 total)
- Stretch and foam roll (5 minutes)













# Functional Firehouse Fitness Equipment

- Space!!!
- Foam buckets, hose, SCBA, heavy stuff to carry, stairs, tires, webbing
- Foam rollers, bands, H2O
- TRX, Dbells, Kbells, bench
- Squat rack (with minimal weight)
- Cable column
- Treadmill, bike, stepmill
- Sandbags, row machine, aerodyne, Jacobs ladder







# Put it all together!

## **Big Picture approach**

How do shifts and workouts relate?

How is your nutrition?

Sleep hygiene?

Are you managing stress?



# Put it all together!

Strong Body, Strong Mind Workout Plan						
Sunday (on shift)	Monday	Tuesday	Wednesday (on shift)	Thursday	Friday	Saturday (on shift)
OFF	Full-body Strength	Light jog, bike or walk with	Crew Interval Workout	OFF	Full-body Strength	Yoga and stretching
Deep breathing	Workout	10 minutes of stretching/ yoga	(slams, crawls, stairs, plank, carry, drag)		Workout + 10 minutes of intervals	
			Deep breathing			

#### **Daily Nutrition Goals**

- -At least 80 ounces of water
- -Limit Sugars (added sugars 40 grams or less)
- -Eat lean protein, veggies and fruit at each meal (4x/day)
- -Have some healthy fats (almonds, avocado)



Before

Thanks for attending!

FIREHOUSE



Please share this with your crew and department.

Reach out to ZAM with any questions.

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Get a FREE Workout and the Slides:

www.FireRescueFitness.com/Firehouse

## Please remember this!



# **Up for a Challenge?**



- ACCESS TO FRF WORKOUT PROGRAMS AND NUTRITION RESOURCES
  - 40-DAY RESILIENCE PROGRAM (FOR FIREFIGHTERS AND CHIEFS)
  - HERO- X WORKOUT
  - THE ULTIMATE FIRE ATHLETE
  - NUTRITION RESOURCES (RECIPES, MEAL PLANNING)
- FRF CHALLENGE COIN
- DONATIONS TO FCSN AND FRCE
- CHANCE TO WIN CASH AND PRIZES

#### **WORKOUTS AND COACHING**







LOG WORKOUTS AND TRACK YOUR PROGRESS ON ANY PLATFORM (MOBILE AND/OR DESKTOP





#### **CHALLENGE COIN**





#### SCIENCE ALLIANCE

