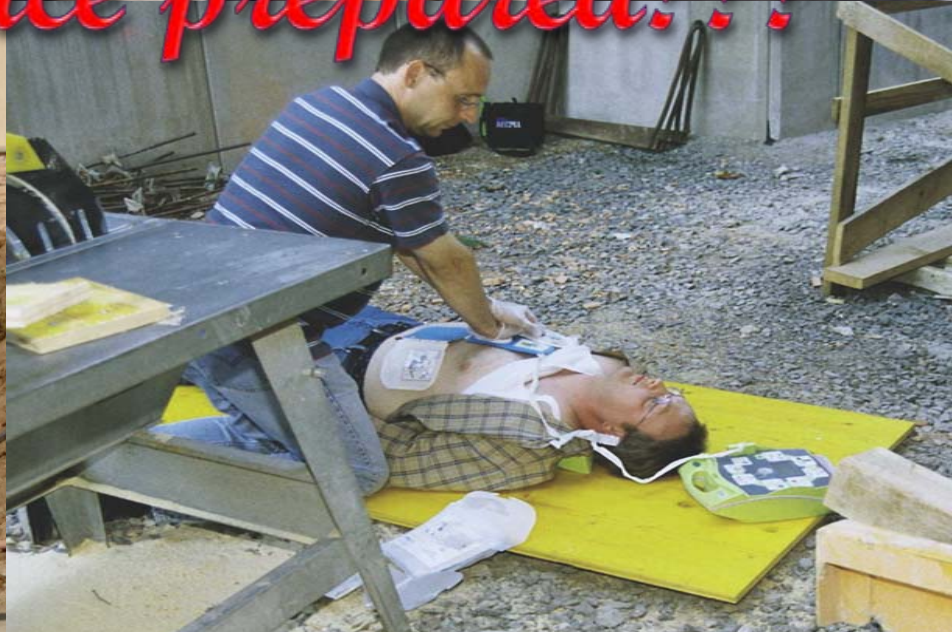


# BUILDING A CARDIAC SAFE WORKPLACE



*Is your workplace prepared???*




# BUILDING A CARDIAC SAFE WORKPLACE



## AGENDA

- ♥ Cardiac Safe: What does it Mean?
- ♥ Identifying the worker or workplace at risk
  - ♥ A discussion of risk factors
- ♥ Reducing the risk of heart disease
- ♥ Preparing the workplace for a cardiac emergency
- ♥ What are the legal responsibilities?
- ♥ How to make a workplace AED program effective
  - ♥ what are the challenges?
  - ♥ What are the solutions?
- ♥ What's new in AED technology
- ♥ Setting up an AED program
- ♥ What's the standard in AED training? Is it enough?
- ♥ Bringing it all together, "life restarts after defibrillation"

# ABOUT US

- 
- ♥ We represent our nationally (and provincially) recognized first aid training company (*HeartZAP Services Inc.*)
  - ♥ We are experienced in establishing AED programs and is the largest AED distributor across Canada (and for Zoll Medical Canada AEDs)
  - ♥ We provide a comprehensive solution for your health and safety needs including any and all aspects of AED program implementation

# WHAT DOES CARDIAC SAFE MEAN?

- 
- 
- ♥ Definition: prepared for **CARDIOVASCULAR** emergencies
  - ♥ **Cardiovascular disease:**  
Heart attacks, strokes, other circulation emergencies
    - ♥ Incidence
    - ♥ Cost
  - ♥ Can we prevent death from a heart attack occurring in the workplace?

# WORKER & WORKPLACE RISK FACTORS for CARDIOVASCULAR EMERGENCIES

## Common “WORKER” Risk Factors:

Age

Race

Gender or

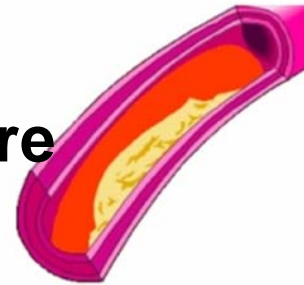
Family history

Lack of exercise

High blood pressure

High cholesterol

Diabetes




# WORKPLACE RISK FACTORS for CARDIOVASCULAR EMERGENCIES


## WORKPLACE & ENVIROMENTAL

- ♥ Demographics (*age, and above factors*)
- ♥ High stress
- ♥ SMOKING
- ♥ Electrical exposure
  
- ♥ Size of facility
- ♥ Number of workers
- ♥ Response time

# Reducing Worker & Workplace Risk

- 
- ♥ PREVENTION: Identify and control the risk factors
  - ♥ Workplace cardiovascular health promotion programs
    - ♥ Anti-smoking programs
    - ♥ Encouraging physical well-being, food choices in cafeterias, etc.
    - ♥ Stress reduction
  - ♥ *Benefits*
  - ♥ EXAMPLE: hearts@work

# Hearts@work



♥ **BC Evidence-based program/health fair** that provides a **one-on-one consult** with a multi-disciplinary **team of health professionals** through a series of 8 interactive stations:

♥ Cholesterol / Diabetes Screening

♥ Blood Pressure

♥ Nutrition

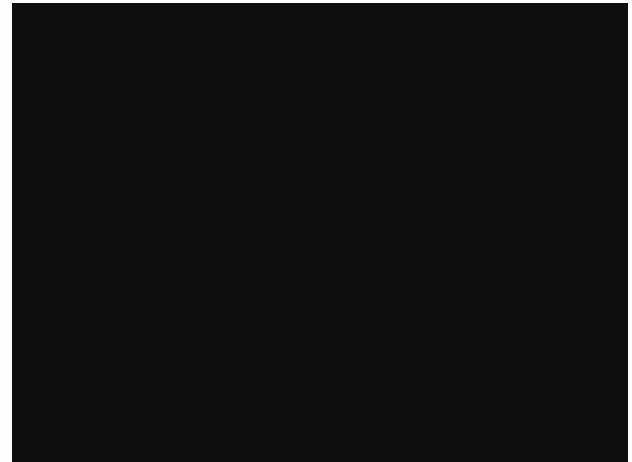
♥ Physical Activity

♥ Stress


♥ Smoking

♥ On-line Cardiac Risk Assessment

♥ Goal Setting



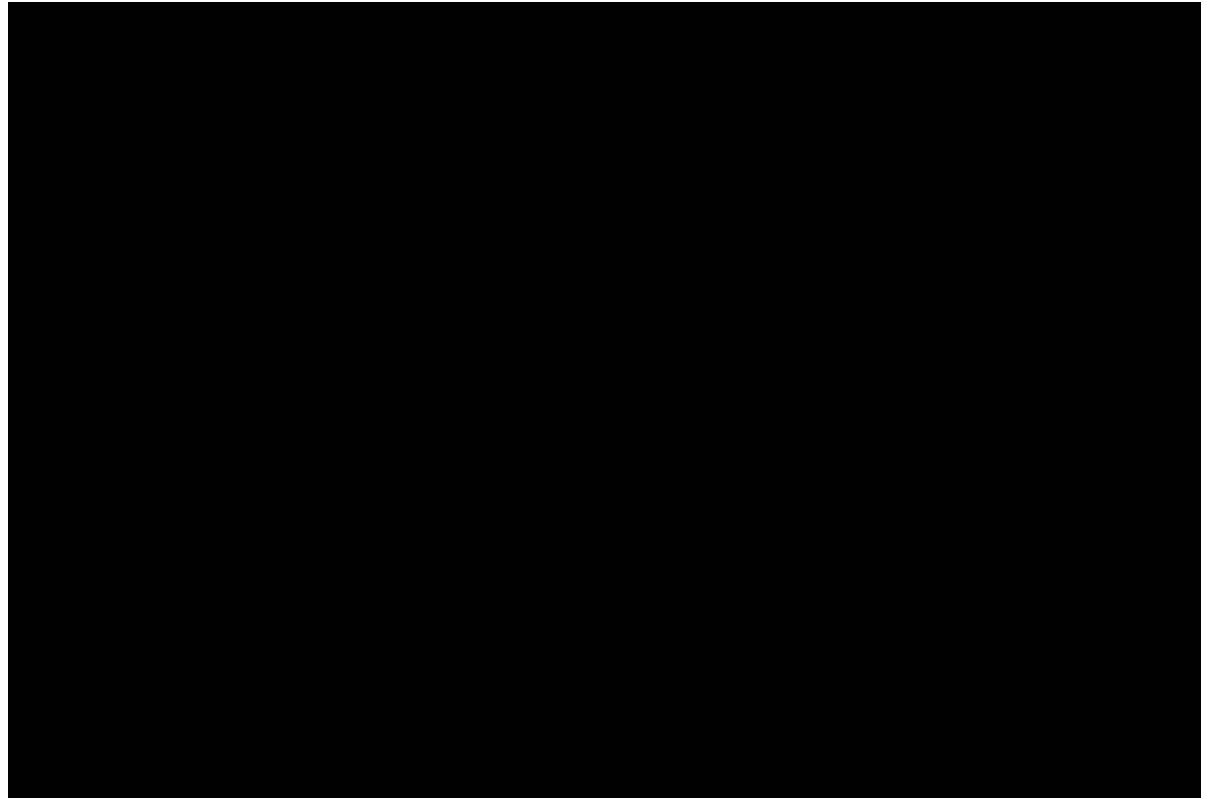
# HEART DISEASE IN THE WORKPLACE?

- 
- ♥ Despite preventive measures, a conservative estimate is that about 350 Ontario workers per year experience a heart attack and or SCA
  - ♥ On average, 10 or less deaths are from electrocution
  - ♥ With today's demographics and aging work force, it is estimated that up to 1 worker per 2000 employees may die of sudden cardiac arrest while at work

# HOW CAN HEART DISEASE MANIFEST ITSELF AT WORKPLACE?



- ♥ Frequently...without warning!!!
- ♥ A co-worker collapses, stops breathing and turns blue!!!



# PREPARING THE WORKPLACE

## Understanding Cardiac Arrest

- ♥ Sudden cardiac arrest (SCA) is the result of an electrical malfunction of the heart that strikes with little or no warning and can lead to sudden unconsciousness and collapse

## Training for an Emergency

- ♥ In the workplace, anyone can use an AED but it is recommended that there are trained personnel on site

# PREPARING THE WORKPLACE



## Having the Tools

- ♥ An AED is one of the most important workplace safety tools to have as part of your first aid kit
- ♥ Does your company need an AED?
  - ♥ Have you done a site assessment
  - ♥ What are your current resources

## Integrating AEDs into your Emergency Plan

- ♥ Is there an emergency response team in place?
- ♥ Risk management and quality assurance
- ♥ AED Placement

# LEGAL RESPONSIBILITIES

- 
- 
- ♥ When it comes to the legal implications of using AEDs to save lives, the law is on your side
  - ♥ Case law suggests companies may eventually be liable for not having AEDs
  - ♥ Chase McEachern ACT

# CREATING AN EFFECTIVE WORKPLACE AED PROGRAM



## ♥ Challenges

- ♥ People resistant to use AEDs
- ♥ Buy in from the company
- ♥ Purchasing, maintenance, and training cost
- ♥ Training issues

## ♥ Solutions

- ♥ Providing education
- ♥ Incorporating an AED program

# NEW IN AED TECHNOLOGY

- ♥ Technological improvements in AEDs
  - ♥ Improved Delivers the correct amount of energy
  - ♥ Biphasic wave forms
  - ♥ Improved Safety profiles
  - ♥ Improved data management
- ♥ AEDs size and weight
- ♥ AEDs available that are more simplistic to use
- ♥ Reduced cost of acquisition




# AED IN ACTION

In an ideal situation

- ♥ There will be two first responders equipped with an AED at the scene of a sudden cardiac arrest
- ♥ Verify unresponsiveness and lack of breathing
- ♥ One Rescuer should initiate CPR immediately upon their arrival at the scene
- ♥ Second rescuer prepares AED

# AED IN ACTION

- 
- ♥ Once electrodes are in place, CPR is stopped since the analysis mode on the AED is activated
  - ♥ If the ECG analysis shows that the patient needs a shock, the AED charges
  - ♥ The AED then prompts the rescuer to give the shock (some devices do so automatically)
  - ♥ Immediately after the first shock you begin 2 minutes of CPR and continue the cycle

# SETTING UP AN AED PROGRAM



Saving a life with an AED involves far more than having a device close at hand .

- ♥ Optimal location & signage
- ♥ Designed and implemented in a manner that manages liability risk
- ♥ Flexible and comprehensive enough to meet your unique personnel and budgetary needs
- ♥ Can help you build strong relationships with your local emergency response or hospital communities


# SETTING UP AN AED PROGRAM




Establish:

- ♥ A centralized management system for the program
- ♥ Medical direction and control of the program
- ♥ Awareness of and compliance with regulations
- ♥ Integration into the Emergency Response Plan
- ♥ Coordination with local Emergency Medical Services
- ♥ Informing and involving staff

# SETTING UP AN AED PROGRAM

- 
- ♥ Selection and technical consideration of AEDs
  - ♥ Ancillary medical equipment and supplies for the workplace AED program
  - ♥ Scheduled maintenance and replacement of AED and ancillary equipment
  - ♥ An AED quality assurance program
  - ♥ Periodic review and modification of the program protocols

# TRAINING STANDARDS

- 
- ♥ CPR/AED training
    - ♥ Check your local PAD program resources
  - ♥ Periodic mock scenarios
  - ♥ Refresher training
  - ♥ Lunch & learn (awareness) sessions

# BRINGING IT ALL TOGETHER



## BENEFITS:

### Life Restarts After Defibrillation

- ♥ Early Defibrillation is the Key to Survival from SCA
- ♥ Your odds of surviving sudden cardiac arrest at Windsor Casino are better than they would be almost anywhere else in North America
- ♥ It's proven that AEDs can dramatically improve survival rates for sudden cardiac arrest
- ♥ Improved employee relationships and workplace morale
- ♥ Real life stories <video>