

**INAIL** Italian Workers' Compensation Authority  
 Department of Occupational and Environmental Medicine, Epidemiology and Hygiene

**First Aid in the workplace**  
 the state of the art in Italy

Bruno Papaleo, Giovanna Cangiano, Sara Calicchia, Diana Gagliardi  
 June 4<sup>th</sup>, 2015

31<sup>st</sup> ICOH Congress, Seoul, Republic of Korea, May 31<sup>st</sup> - June 5<sup>th</sup>, 2015

**WHO ARE WE?**

- INAIL is the National Institute for the Insurance against accidents at work and occupational diseases; it protects workers whose activities are classified at risk by the law.
- In the Department of Occupational and Environmental Medicine Epidemiology and Hygiene, a working group that conducts research and training on First Aid and Basic Life Support and Defibrillation has been set up

**OUR GOALS:**

- spreading the emergency and first aid culture at work;
- collecting and promoting best practices on first aid at work and early defibrillation
- testing and proposing innovative training paths for occupational physicians and other health professionals who are involved in first aid training courses

**INAIL**

**GOLDEN HOUR**

The outcome of accidents at work depends on:



- event severity/extent of the injury
- effectiveness of the assistance offered in the early hours (including the intervention of first aider)

**INAIL**

**Cardiac arrest**

- Italy has an estimated incidence of cardiac arrest of approximately 60000 cases per year
- Beginning cardiopulmonary resuscitation and using DAE within 3-5 minutes of cardiac arrest can increase survival rates from 49% to 75%

**Trauma / Injury**

- 1<sup>st</sup> cause of death below 40 years of age.
- High social costs for lost lives and disabling outcomes
- The percentage of preventable deaths is estimated between 33% and 73% with adequate pre-hospital treatment
- Most of the deaths occur before arrival at the hospital

ERC guidelines 2010 (Manuale PTC Base - IRC) **INAIL**

**ITALIAN PRODUCTIVE SYSTEM CHARACTERISTICS**

Average size of the enterprises (in%)

Enterprise Size	Percentage
Micro (< 10 employees)	94%
Small (< 50 employees)	4%
Medium (< 250 employees)	1%
Large (> 250 employees)	1%

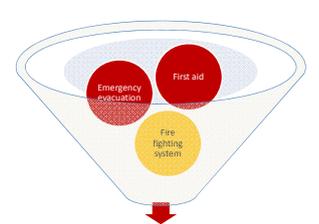
No of workers by enterprise size (in %)

Enterprise Size	Percentage
Micro (< 10 employees)	65%
Small (< 50 employees)	25%
Medium (< 250 employees)	13%
Large (> 250 employees)	21%

- Enterprises with less than 250 employees are the most involved in fatal accidents (96.8%)
- The peak of accidents occurred in micro-enterprises (65%)
- In this system, it's rarely available a department of occupational medicine or an emergency service on site

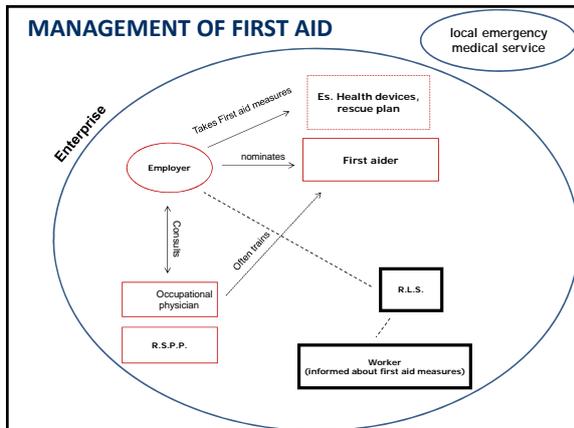
Source: ISTAT 2011 **INAIL**

**MANAGEMENT OF FIRST AID**



**EMERGENCY PLAN**

The first aid management is part of protection measures, within the wider chapter of emergency management. **INAIL**



### FIRST AID TRAINING COURSES



- ❑ Workers' training must be conducted by medical personnel, in collaboration with nurses or other H&S professionals
- ❑ The training takes 12 or 16 hours, depending on the company classification and must include specific risks.
- ❑ Re-training is required every three years



### AED IN THE WORKPLACE (1)

In Italy the AED is not required in the workplace, but only in sport centers. In other places is recommended (public places with a high number of visitors, isolated areas...)



sport complex



public places (schools, universities, offices)



airports, railway stations, shopping malls, hotels, restaurants



High risk industrial facilities

Since 2013 a decree requires sport societies to have the AED

### AED IN THE WORKPLACE (2)



- ❑ The legislation on early defibrillation gave a large contribution to the culture of emergency
- ❑ In addition, INAIL established a discount on insurance premium for those companies having AED among their emergency equipment, even if not required by the law



### CRITICAL ISSUES



The main critical issues are related to:

- ❑ FIRST AID TRAINING
  - ✓ In many cases too much theoretical and not enough practical
  - ✓ made only to fulfill the norm and not commensurate with the present risks
- ❑ PROCEDURES/MANAGEMENT
  - ✓ companies perceive First Aid like a waste of money and resources

**The efficacy of the first aid management is not currently monitored**



### RESEARCH PROJECT

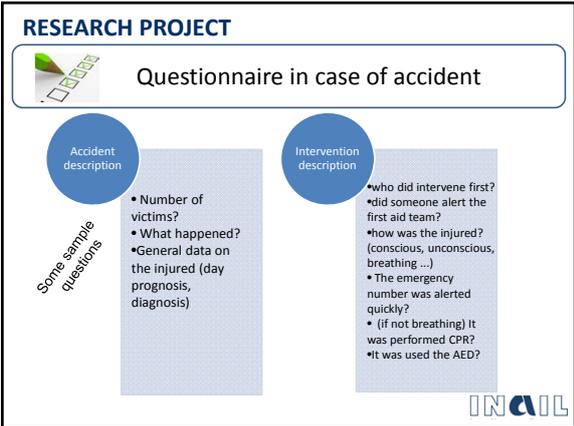
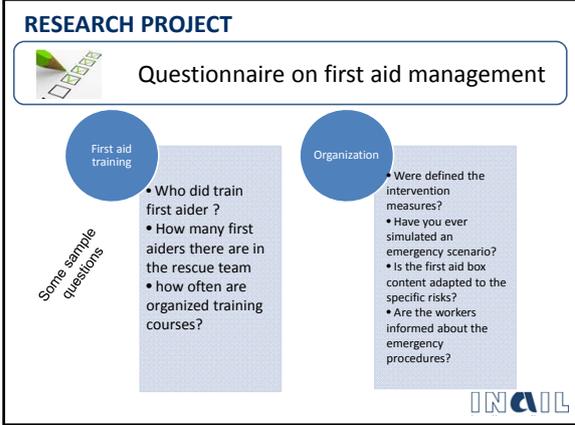
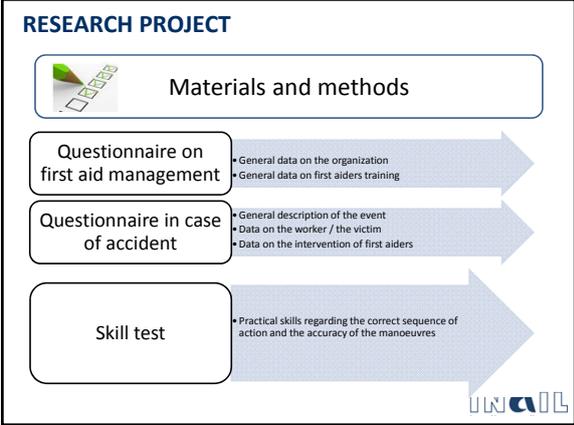

**Aim**

To assess the efficacy of first aid system at work

**How?**

- ❑ Assessing the efficacy of first aider training
- ❑ Checking how (and if) the first aid system responds to the emergency and how (and if) the first aiders manage the early emergency intervention



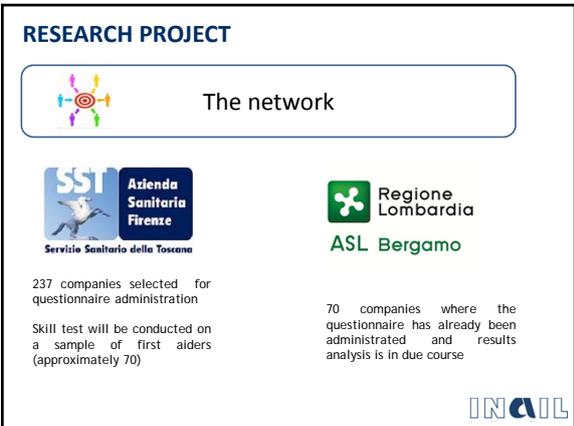


### RESEARCH PROJECT

#### Computer-assisted scenario

2. Assess the accuracy of the maneuvers

With computer - assisted manikin that records a series of parameter (for example the depth of the chest compressions)



- ### NATIONAL PROPOSAL
- To improve FA management it is necessary:
- to collect data on the effectiveness of FA in companies to propose legislative updates and good practices
  - to improve the training of occupational physicians, who have the task to sensitize employers and employees and to carry out the training of company first-aiders.
  - to integrate current legislation with international guide-lines, with special reference to BLS/D training
  - to sensitize institutions to the importance of AEDs in the workplace.
-

PROPOSAL - ICOH WORKING GROUP / New SC

- collect and share data on first aid management at work
- collect and share data on the efficacy of first aider intervention
- collect and share best practices
- according to other scientific organizations (ERC, ILCOR, WHO) propose further emergency intervention protocols (for health professionals and for non-health people);

