

Operational Considerations Equipment and Tools used by IRC

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Reference CBRN Group IRC



CBRN Equipment and Tools



CHEMICAL HAZARD

Absorbent undersuit



Suit Cat. 3 type



- **Characteristics:**

Protection suit Indutex - Jet Guard Plus

Chemical risk

Specification is available for NS

CHEMICAL HAZARD

Masck sekur Sfera



- **Characteristics:**
Special rubber
Accordin to the law EN 148

CHEMICAL HAZARD

Filter A2B2E2K2 HG P3



- Characteristics:

- Chemical protection for the gas type A,B,E,k 2 class,
- 0,2 micron - P3 UNI EN 143;
- More then 0,2 micron, of type biological risk
-

Filter M90- Military Type



- Characyeristcs:

- Chemical protection for the gas type A,B, 2 class
- 0,2 micron - P3 UNI EN 143;
- More then 0,2 micron, of type biological risk
- Radioactivity protection Nato UNI/EN 148/1

Gloves



CHEMICAL HAZARD

Chracteristics:

- Gloves in Nitrile
- Used in sanitarian sector
- Lenght 30 cm

Gloves Duomix Mapa



Characteristics:

- Gloves in Neoprene
- Olso against biologic and radioactive

Gloves Chemply Mapa



Characteristics:

- Gloves in neoprene in chlorine
- Olso biological risk

Boots



CHEMICAL HAZARD

Characteristics:

- Boots EN 345 – 1 s5 PVC
(Polyvinyl chloride – Plastic matirial)

Schotch tape:



Characteristics:

- *American Tape Saratoga*

BIO HAZARD

Absorbent undersuit



- **Characteristics:**
 - Protection suit Type 4 Indutex – Spray Guard
 - Double layer

BIO HAZARD



Shoes overboots:



Mask FF P3 :
EN149

Suggest for the protection against SARS
ed A/H1/N1, Meningitis, Hepatitis B, C,
and so on.



Glasses drops in PVC: EN 166 – CE



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Absorbent undersuit Radioactive HAZARD



- **Characteristics:**

- Protection suit Type 4 Indutex – Spray Guard
- Double layer

Radioactive HAZARD

Masck sekur Sfera



Filter “Reaktor” – Dräger

Characteristics :

Iodine radionuclide

- **Characteristics:**

Special rubber

According to the law EN 148



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Gloves



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Gloves Duomix Mapa



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Characteristics:

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Radioactive HAZARD

The Decontamination Unit

Two tents :

- one tent is divided 3-4 corridors equipped by pistols linked spiral pipes for patients on stretchers
- Second tent is equipped of showers for patients not on stretchers

The whole is completed by a containment basin of the contaminated water:

- ✓ the lines way for stretchers
- ✓ aspiration pump for the contaminated water
- ✓ assembly time is about 20/30 minutes
- ✓ decontamination capacity is about 80/120 person/h.



The Decontamination Unit



The Decontamination Unit Military Corp

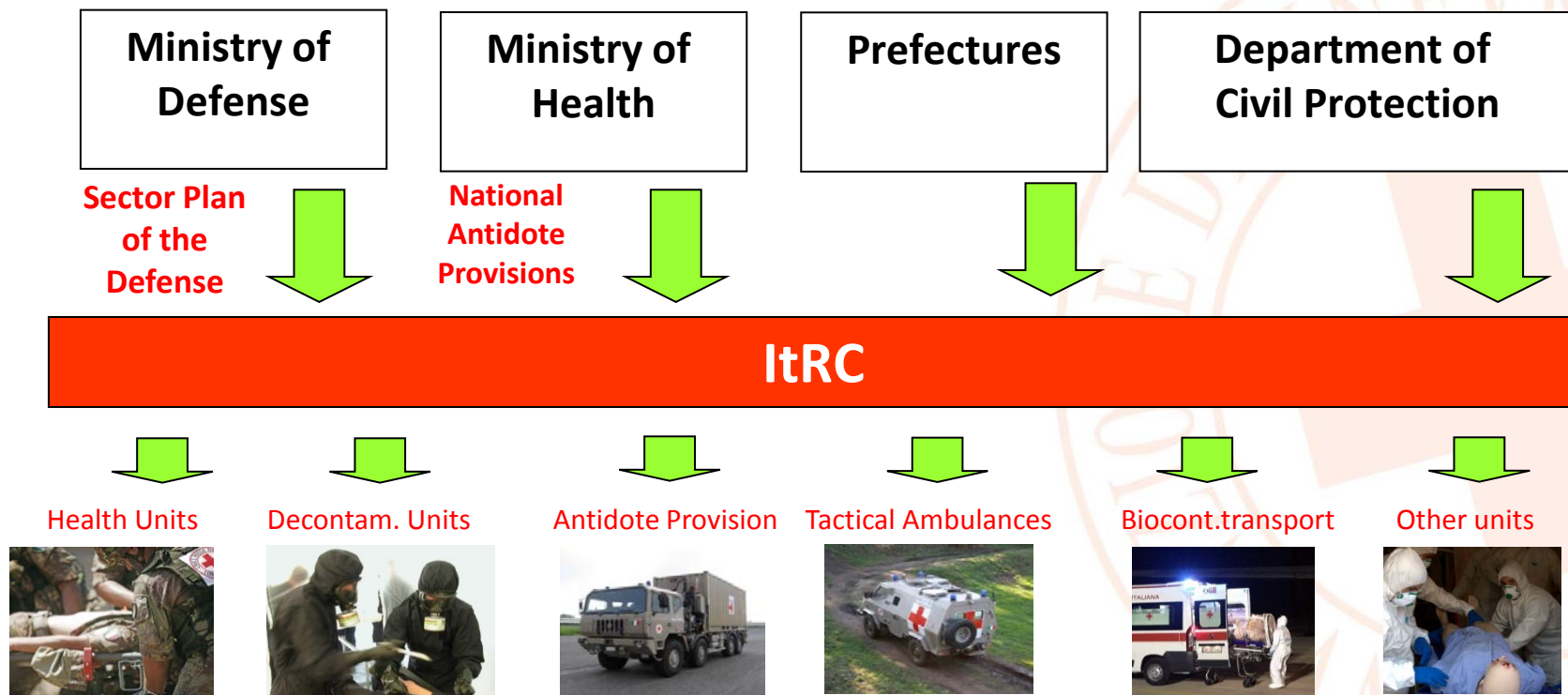


training Volontaires and Staff
Summer School 2015 June
Rome, Italy

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The activation of the It RC



ItRC role of civil protection and civil defense
in CBRN emergencies

Biocontent UNIT – Tools and Transport

Ministry of Health

Department of Prevention and Communication

Directorate General for Healthcare collaboration agreement 12/2006

for the use of **the Italian Red Cross**

- in aid to the actions covered by the Ministry of Health
- in its central and peripheral for the fulfillment of the tasks set for Italy from the application of the new International Health Regulations
- to strengthen the surveillance system and alert the country's borders
- during other emergency health REPRESENTATIVES a threat to public health

National Public Health Department IRC



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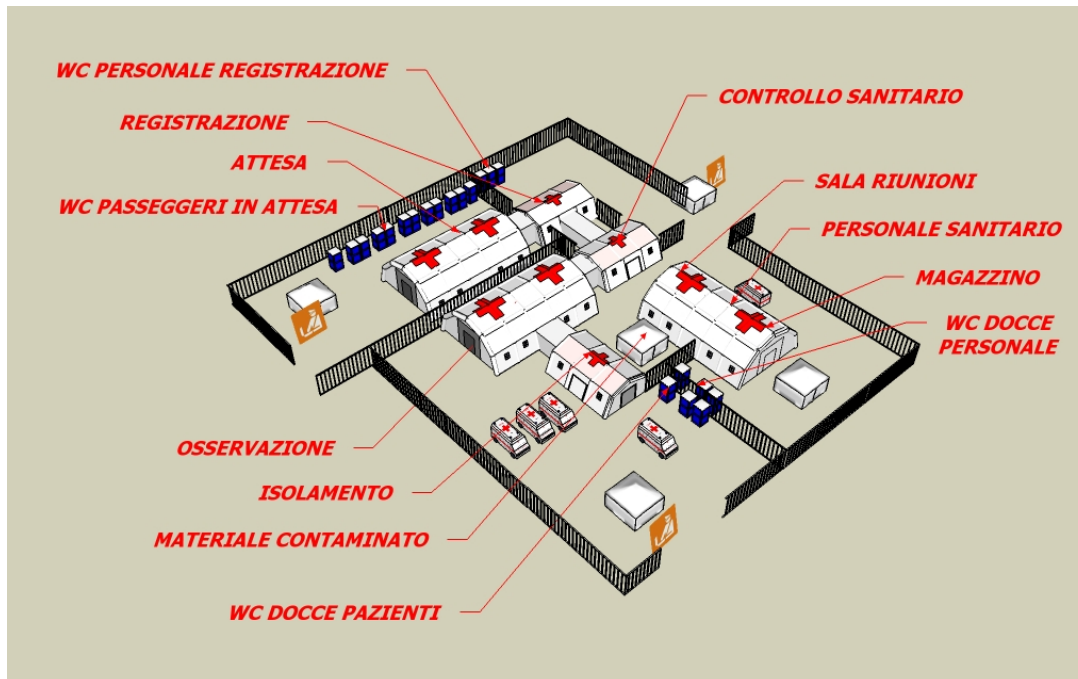


Biocontent UNIT – Tools and Transport

Training and retraining of personnel ... hygiene, public health and international prophylaxis

Ports , airports , land border places , on board ships and aircraft and other means of transport as well as in any additional site needs under the International Health Regulations in aid to the Medical Staff and Technical Health Ministry of Health

Supply of materials , equipment and structures suitable for conducting health activities of supervision , control and preventive health care in the sites where such activities are carried out institutionally



Health channel



Biocontent UNIT – Tools and Transport



Isolation Room
mod. ISO-ARK 90-120
Negative pressure

Pneumatic Tent



In the first phase on emergency ISO-ARK 90-120 It is used to the treatment and care of the contaminated people (max 1-2 patients). ISO-ARK 90-120 it is put inside the tent.

Biocontent UNIT – Tools and Transport



IsoArk N36 - Isolation Stretcher

- Transport of isolation stretcher
- It is adapted to every type of ambulance
- It is equipped with trolley



Biocontent UNIT – Tools and Transport



IsoArk N36 - Isolation Stretcher

Transport of **Isolation Stretcher** by helicopter with the winch



Edo Falcone
PHOTOGRAPHS

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Biocontent UNIT – Tools and Transport



**High Biocont. Transfer
Isolated Module BETH-RL**

For the transfer of
potential contaminated
patients

- Fiat ducato 9 seat
- For 2 drivers (2 drivers are separated from the back seat) and 7 patients

Biocontent UNIT – Tools and Transport



- It was projected in Italy in 2011-2012 by Israel technology
- It is the first prototype in Europe and in the world probably
- Equipped with the autonomous filter EPA and it is powered by car. If the car is stopped, there is external current power.
- Inside it is negative pressure.
- It is projected to be transported by aircraft (in Italy C130)

Biocontent UNIT – Tools and Transport



- It was utilized in August 2015 to transport one Italian patient abroad that was in contact with one victim of Ebola. He arrived in Rome and was transferred by IRC Ducato car to Spallanzani Hospital. (Sacco-Milan)
- The Ducato is equipped with decontamination machine that is in function for cleaning BX24 diluted in water
- In Italy the IRC is considering other project to improve the transport of contaminated people.

Thanks for the attention,

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