



ETHREAT PROJECT



WORKSHOP on HEALTH PROGRAMME
30/9-1/10 2009, Luxembourg

The Project, Pilot Course and Results

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- **Deliberate release**
- **Influenza pandemic**
- **Emerging or re-emerging ID**
- **Environmental exposures**



PROJECT AIM

Plan and develop an **educational package** containing the knowledge and training material necessary to empower European health professionals to rapidly recognise clinically and adequately respond to **new public health threats**, like attacks with biological, chemical and radiological agents.



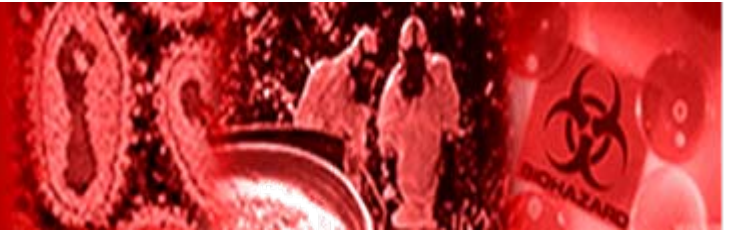
PROJECT PARTNERS

- University of Athens, Dept of Hygiene and Epidemiology-Coordination, **Greece**
- PH Research Association Saxony, Dresden University of Technology, **Germany**
- Public and Environmental Health Unit, London School of Hygiene and Tropical Medicine, **UK**
- Institute of Hygiene and Epidemiology, 1st Faculty of Medicine, Charles University, Prague, **Czech Republic**
- Nofer Institute of Occupational Health, Lodz, **Poland**
- Public Health, Medical University, Sofia, **Bulgaria**



OBJECTIVES

1. Set up a ***list*** of the educational objectives for front-line health professionals
2. Create an ***inventory*** of all existing courses and training material relevant to the training of health professionals of new health threats thematic addressed to health professionals (including Armed Forces and front-line public health professionals)
3. Plan and develop a common European ***educational package and algorithm*** (guide) for action to enhance the understanding and response of health professionals to new health threats.



OBJECTIVES

4. Organise a ***pilot course*** to apply the educational package to a selected group of European health professionals, who in turn, can act as trainers, so as to receive feedback for improvements.
5. Prepare an ***evaluation report*** after having evaluated and assessed with the help of experts, trainers and trainees, the educational material and training methods.
6. Create a ***web site*** for discussion, evaluation and dissemination of the educational material.



QUESTIONNAIRES

- explore the opinions of the target audience and of European experts in the area of PH and CBRN
 - on the existence and appropriateness of currently available training programmes,
 - the desired content of a basic educational package

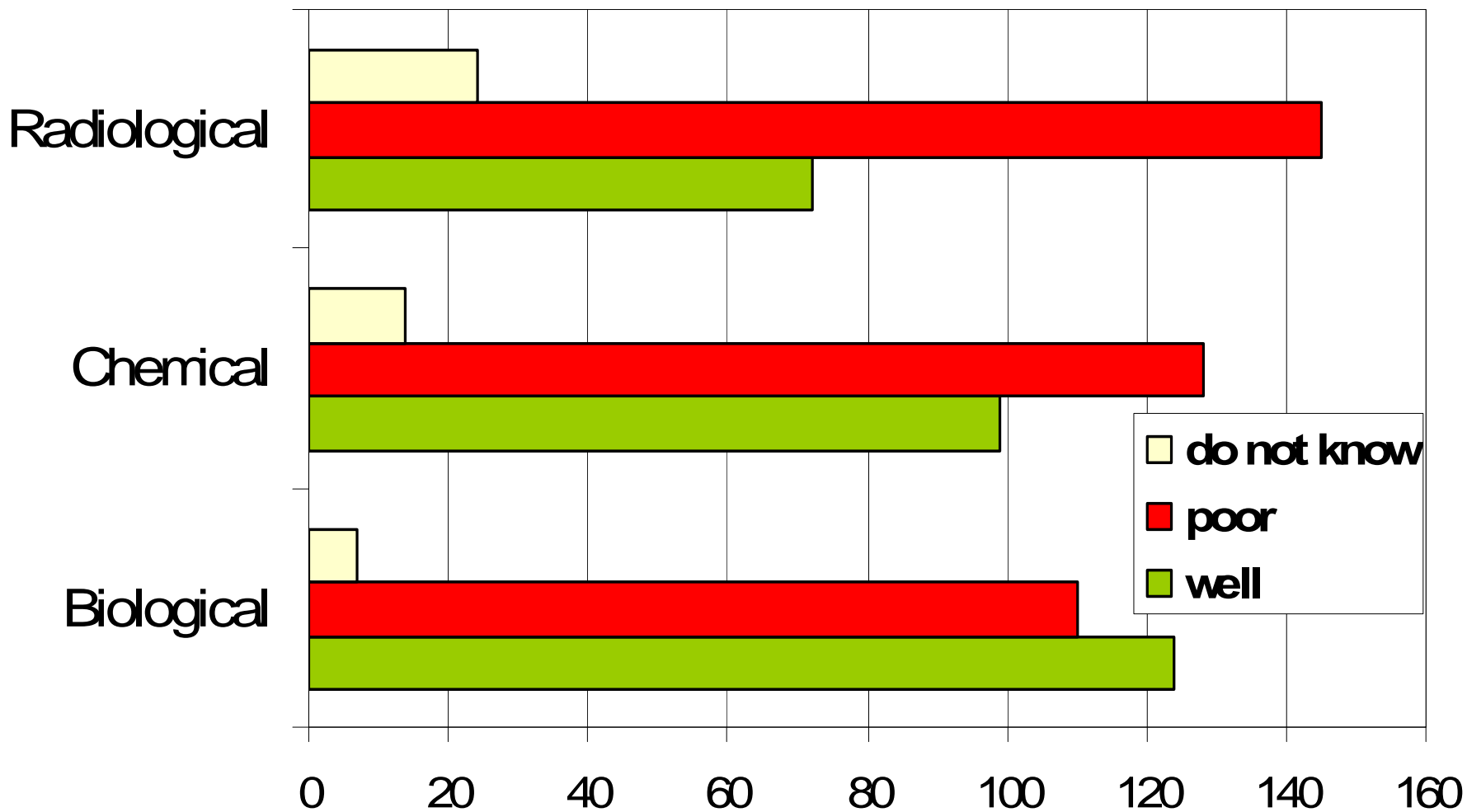
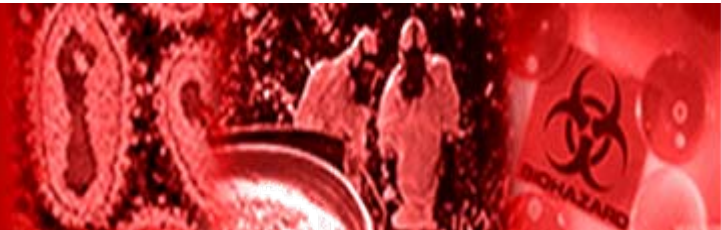


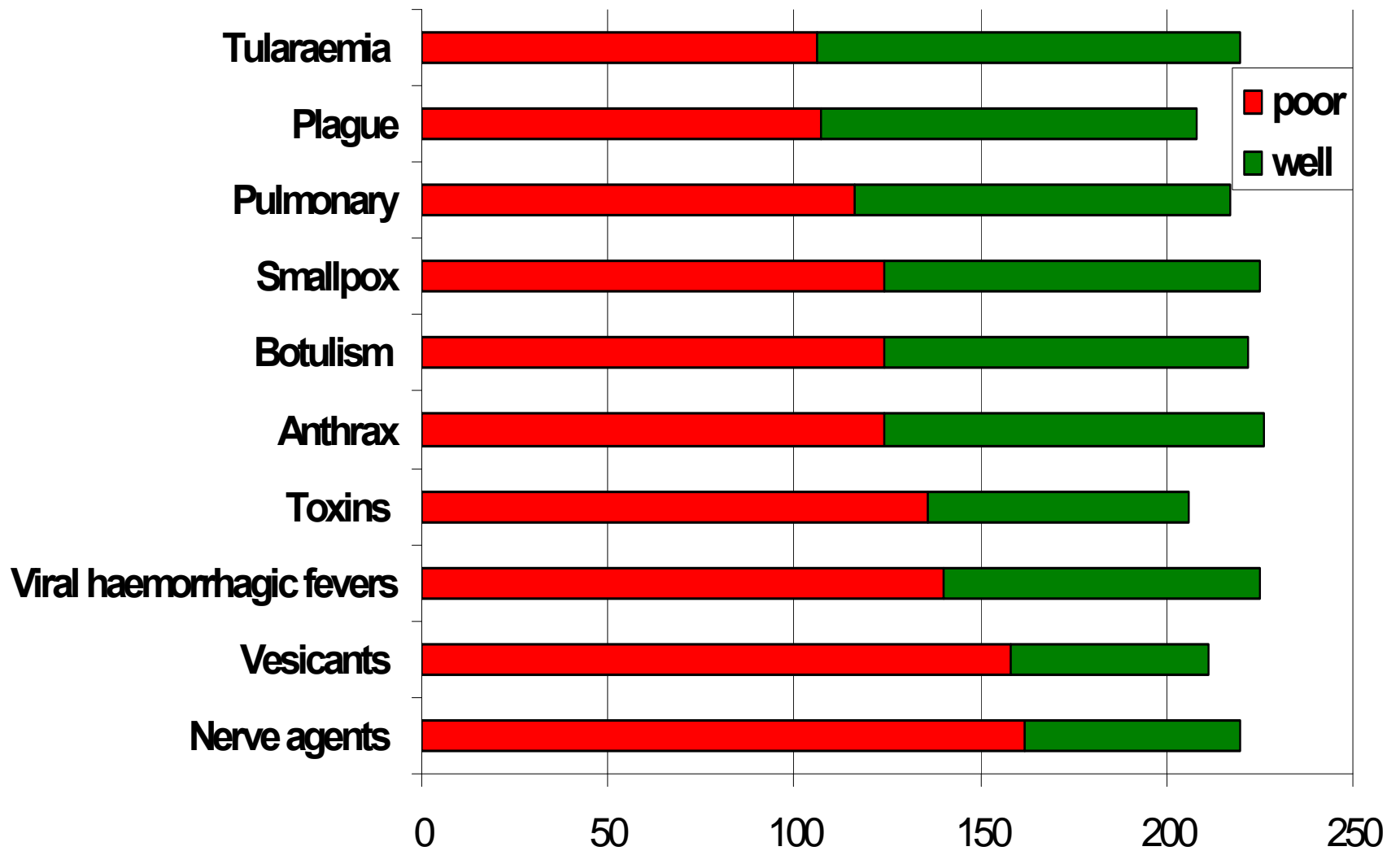
METHODS

- two questionnaires addressed to FLHPs and to CBRN experts in Europe
- administered in hard-copy form and via the project website
- from March to September 2006



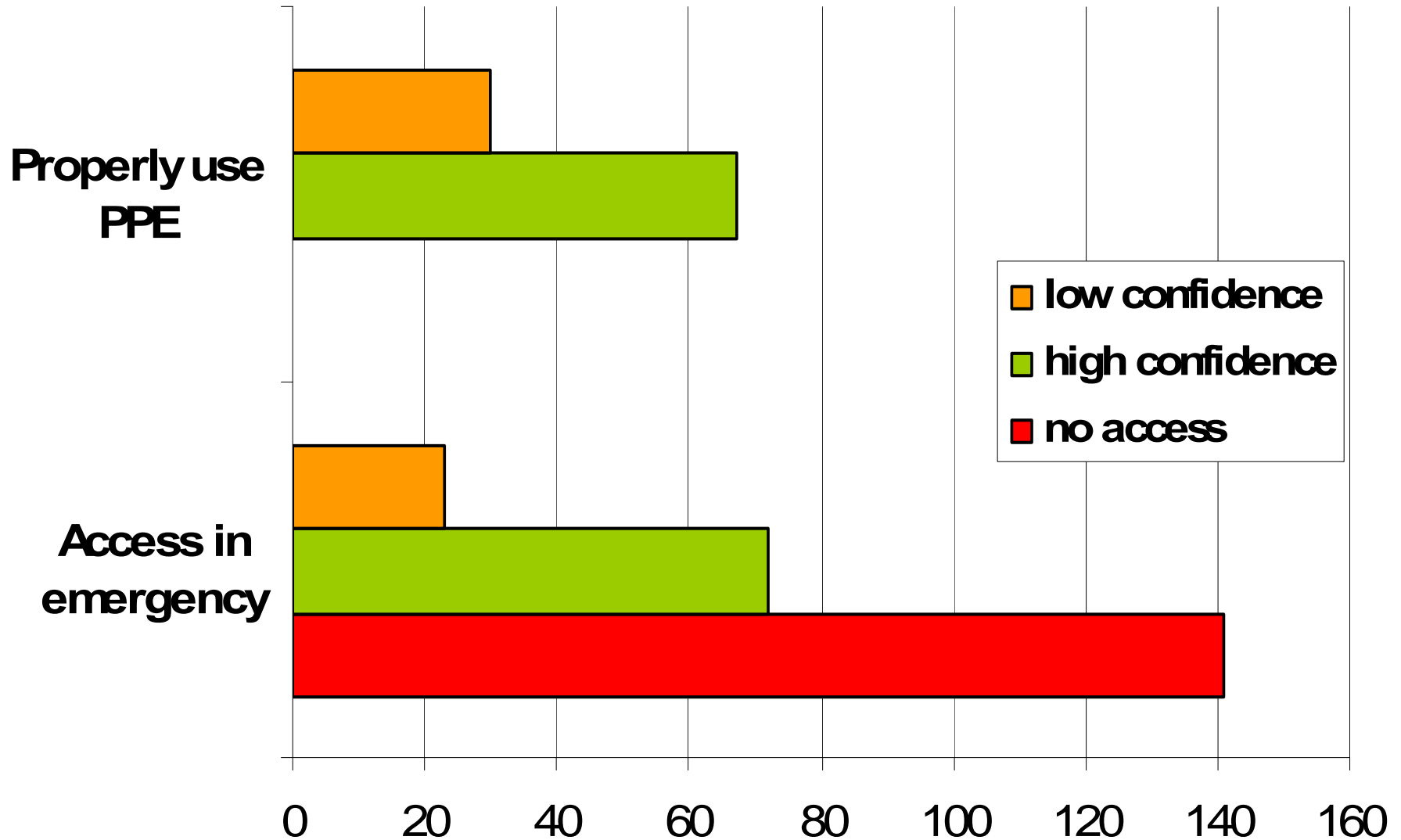
- total valid questionnaires: 241 from 23 European countries
- > 50% of the responding FLHPs feel that they are currently poorly or very poorly prepared to deal with a chemical (53,3%), biological (47,2%) and radiological (57,6%) incident.

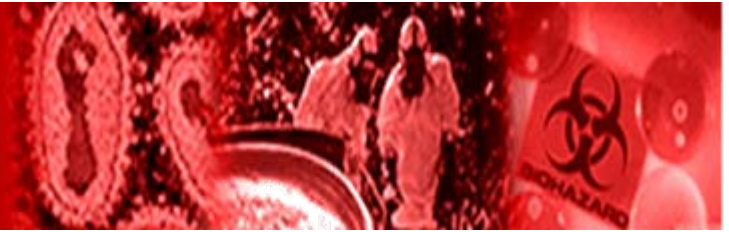




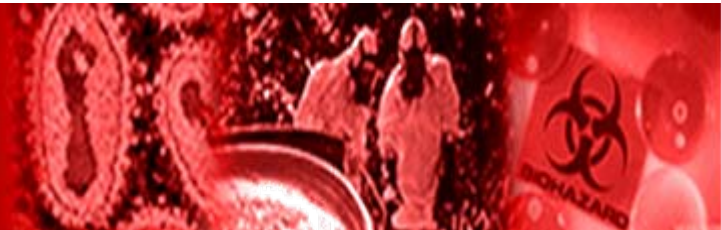
Opinion of FLHPs on their ability to manage patients affected by various high threat CBRN agents

Opinion of European FLHPs on their ability to access PPE at their workplace and if yes, to use it properly



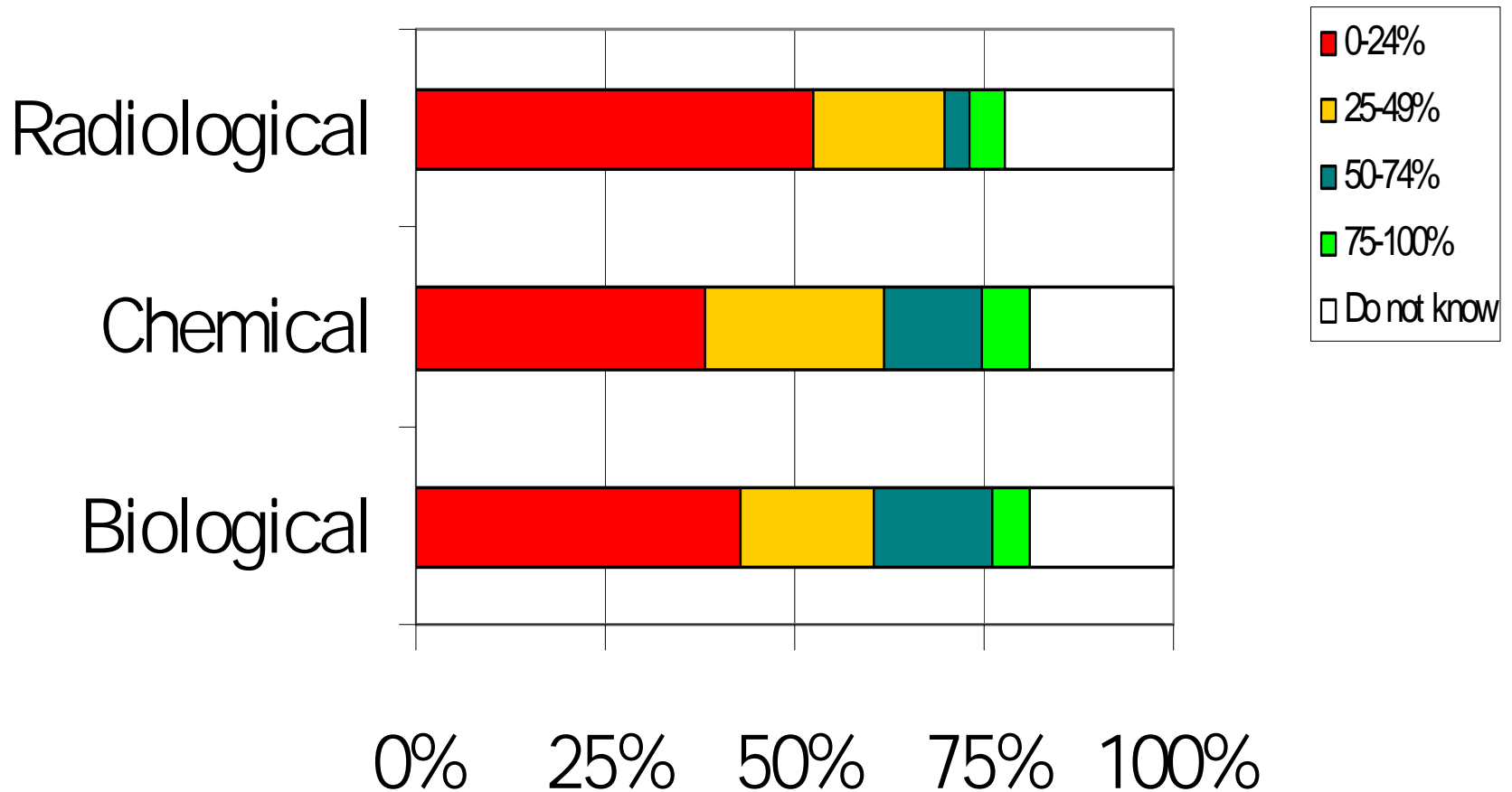


- 49,6% of responding FLHPs not aware of an operational plan for responding to a CBRN incident nor their role in this plan
- 39% of FLHPs have received training on CBRN threats because they were self-motivated
 - >50% have trained in the last two years, probably reflecting the currently increased awareness regarding CBRN threats



Expert Questionnaire

- 63 questionnaires from 16 EU MS
- All responding experts report that they are aware of an operational plan to manage CBRN incidents
- 70% of experts state that >50% of FLHP in their country need training



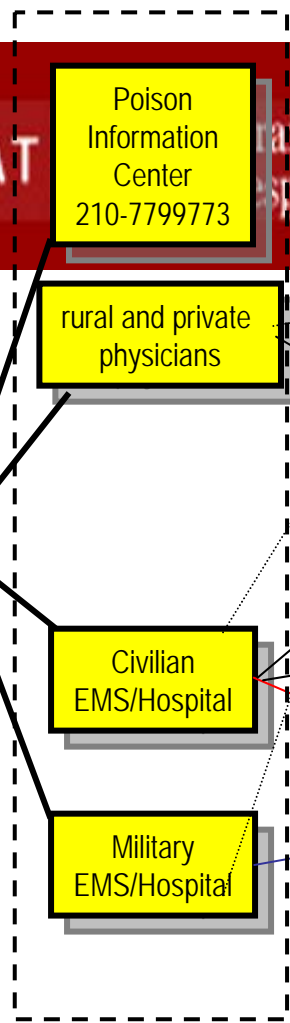
Opinion of European CBRN/ PH experts on the ability of FLHPs in their country to respond to a CBRN event in their role



CBRN INCIDENT RESPONSE ALGORITHM

VICTIMS & WORRIED-WELL SEEK HELP

CBRN Incident



ETHREAT

Poison Information Center
210-7799773

Prefecture Public Health Officer

HellenicCDC
210-521 2000

National Health OpCetr

Ministry of Defense

GAEC

General Secretariat of Civil Protection [GSCP]
210-335 9900

Reporting to Government Hierarchy

GSCP Crisis Management Group

Incident Commander

CBRN Incidence Response Groups & Resources

.....> Inform
——> Report to

HAEA = Hellenic Atomic Energy Committee
* National Health Operations Center

STATE CBRN RESPONSE IN EU COUNTRIES / ΚΡΑΤΙΚΗ ΑΝΤΙΔΡΑΣΗ ΣΕ ΧΒΠΡ ΕΠΙΘΕΣΗ

GREECE/ΕΛΛΑΔΑ

YOUR COUNTRY

LEVEL OF COMMAND
ΕΠΙΠΕΔΟ ΔΙΟΙΚΗΣΕΩΣ

POLITICAL LEVEL
ΠΟΛΙΤΙΚΟ
ΕΠΙΠΕΔΟ

Reporting to
Government Hierarchy
Υπουργικό Συμβούλιο
υπό την αιγίδα του Πρωθυπουργού

STRATEGIC LEVEL
ΣΤΡΑΤΗΓΙΚΟ
ΕΠΙΠΕΔΟ

General Secretariat
of Civil Protection [GSCP]
Γενική Γραμματεία
Πολιτικής Προστασίας [ΓΓΠΠ]

INCIDENT
REPORT
[all services]
ΑΝΑΦΟΡΑ
ΣΥΜΒΑΝΤΟΣ
[από όλες
τις υπηρεσίες]

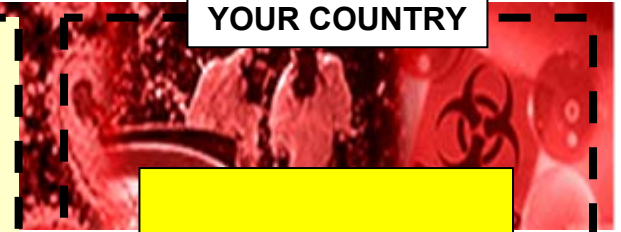
OPERATIONAL LEVEL
ΕΠΙΧΕΙΡΗΣΙΑΚΟ
ΕΠΙΠΕΔΟ

GSCP
Crisis Management Group
Ομάδα Διαχείρισης Κρίσεων
ΓΓΠΠ

TACTICAL LEVEL
ΤΑΚΤΙΚΟ
ΕΠΙΠΕΔΟ

INCIDENT
COMMANDER
ΔΙΟΙΚΗΤΗΣ
ΠΕΡΙΣΤΑΤΙΚΟΥ

CBRN Incidence
Response Groups
& Resources
Πρώτοι Ανταποκριτές
ΧΒΡΠ περιστατικού
& Πηγές/Μέσα

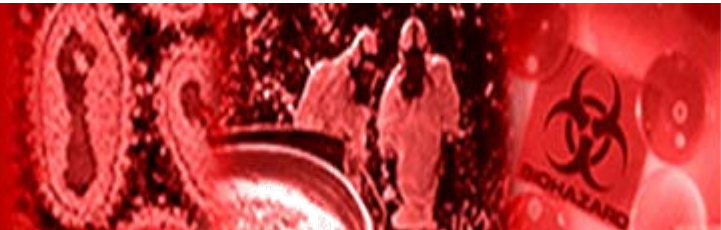


[Placeholder box for YOUR COUNTRY - Political Level]

[Placeholder box for YOUR COUNTRY - Strategic Level]

[Placeholder box for YOUR COUNTRY - Operational Level]

[Placeholder box for YOUR COUNTRY - Tactical Level]



PILOT COURSE

- 3-day awareness course in Athens, May 07
 - 35 participants (mix: FLHP and higher level)
 - 1st day: Chemical threats
 - 2nd day: Biological, Risk communication, Psych effects
 - 3rd day: Radiological, Triage, Decontamination and Algorithms of response
- In general received well but participants wished for:
 - Hands-on training (PPE, Decon)
 - Scenario discussions



EDUCATIONAL MATERIAL

- Handbook: basic knowledge, in a user-friendly format for
 - Crisis management
 - Infection control
 - Biological, chemical and radiological threats (overview, clinical presentation, key management points)
 - Principles of scene management, triage and decontamination
 - Psychological effects of disasters and terrorism
- Memory cards w basic info of the above
- CD-ROM: containing resources, pilot course material, algorithms

ETHREAT | European Training for Health Professionals on Rapid Response to Health Threats



How to respond to radiological, biological and chemical threats

A guide for the European
Front-Line Health Professional

The ETHREAT Scientific Committee



ΕΘΝΙΚΟ ΚΑΙ ΚΑΠΟΔΙΣΤΡΙΑΚΟ
ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ
NATIONAL KAPODISTRIAN
UNIVERSITY OF ATHENS

INTRO

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ETHREAT | European Training for Health Professionals on Rapid Response to Health Threats



CLINICAL SYNDROME	THINK	LOOK FOR	KEY MANAGEMENT POINTS
Fever and Disseminated rash sometimes hemorrhagic	Viral exanthems (e.g. measles, rubella, varicella, erythema infectiosum, supitum) meningococcal infection viral encephalitis toxic shock syndrome gram (-) sepsis leukemia or solid tumor, Haemolytic Uremic Syndrome	<ul style="list-style-type: none"> • Travel history in endemic areas • Insect bites • Laboratory accident • Deliberate release 	<ul style="list-style-type: none"> • Infection Control Precautions: STANDARD, CONTACT (+/-) AIRBORNE • Isolate patient immediately • ID consultation • Supportive care • Post-Exposure Prophylaxis or vaccination, if indicated • Report immediately to PH authorities
	BUT ALSO ✓ Smallpox ✓ VHF		

FEVER AND RASH

	CLINICAL SYNDROME	THINK	KEY MANAGEMENT POINTS
VESICANTS Or Corrosives	rapid (Acids, Oxidizers, Lewisite, Mycotoxin) delayed onset (Hydrofluoric acid, Alkalis, Mustards) Symptoms: runny nose, burning, loss of voice, coughing, dyspnea Eye: irritation, redness, tearing, pain and blepharospasm, blurred vision, corneal ulceration Skin: itching, redness, pain, blistering/burns (early or delayed onset)	✓ Acids: Hydrochloric acid, Nitric, Sulfuric, Hydrofluoric Acid ✓ Alkalis: Sodium Hydroxide, Potassium Hydroxide ✓ Oxidizers: white phosphorus ✓ Mustards ✓ Phosgene Oxime ✓ Plant dermatitis ✓ T2 mycotoxin	<ul style="list-style-type: none"> • Remove from area of exposure • Prompt Decontamination • If Lewisite is strongly suspected, administer BAL or dimercaprol • Poison Centre, Toxicology, Ophthalmology, Plastic Surgery consultation • Report to authorities
HYDROCARBONS	rapid onset (esp. in enclosed spaces) Symptoms: somnolence, nausea, vomiting, agitation, possible GI burns, tachycardia, dysrhythmias, hypoxemia Skin: normal Pupils: normal Secretions: normal	✓ Gasoline ✓ Toluene, ✓ Lamp oil ✓ Lighter fluid ✓ Carbon tetrachloride	<ul style="list-style-type: none"> • Remove from area of exposure • Remove clothes if contaminated (flammable) • Administer O₂ • Avoid adrenergic drugs • Poison Centre, Toxicology consultation • Report to authorities

The logo consists of three overlapping, semi-transparent white trapezoidal shapes pointing to the right, creating a sense of depth and movement.

ETHREAT

European Training for Health Professionals
on Rapid Response to Health Threats



EUROPEAN
TRAINING
FOR **H**EALTH PROFESSIONALS
ON **R**APID
RESPONSES
TO **H**EALTH
THREATS

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