

#### Nederlands Forensisch Instituut Ministerie van Veiligheid en Justitie

#### Forensics and CBRN incidents

Training for police, fire brigade and medical staff to avoid destruction offforensic evidence at the scene of incident.

Ed van Zalen *Programme manager CBRN* 



### **Content**

- Introduction to the NFI
- The NFI CBRN-E programme
- Forensics
- Goals to be achieved



## **NFI and FIELD LAB**

Justice





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## Mission

### **NFI** provides

high quality forensic services

with state-of-the-art technology and science

on behalf of clients

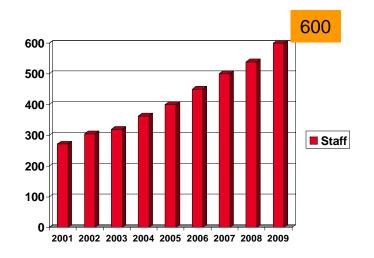


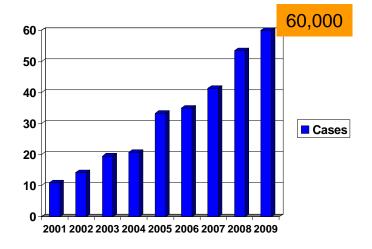




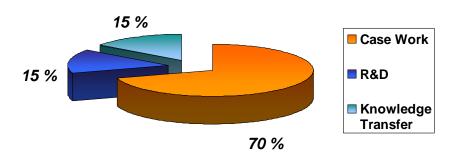


## **Key Figures**









## **Customers**



#### **National**

# PROSECUTION POLICE

Magistrates

## Government Agencies for example:

- MoD
- Secret Services
- Competition Authority
- Customs
- Tax Service
- Integration and

Naturalisation

Service

#### **International**

#### **International Courts**

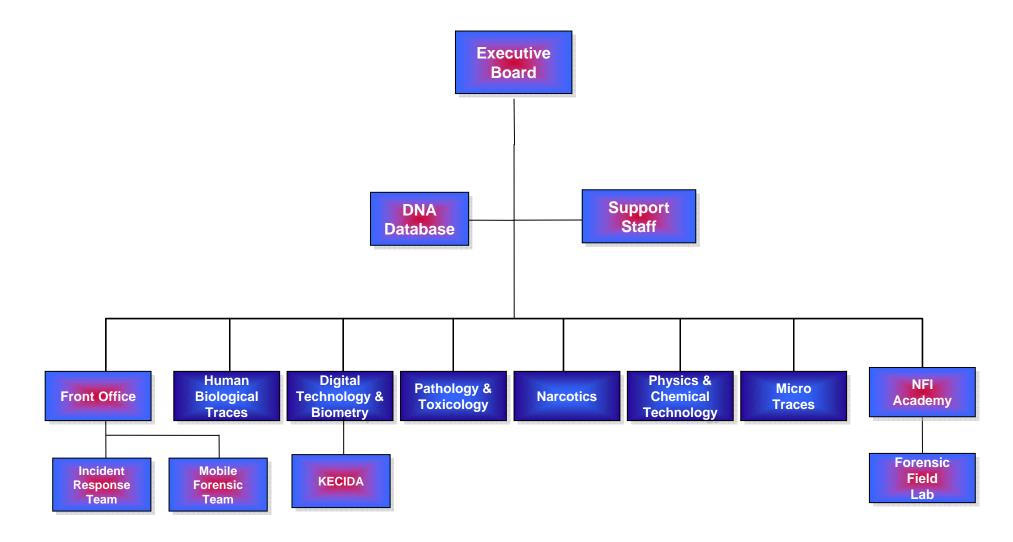
- International Criminal Court
- Former Yugoslavia
- Sierra Leone
- Libanon

**United Nations** 

Intl. Forensic Institutes

#### **Customers**







## CBRNE programme



**Chemical agents** 



**Biologic agents** 



Radioactive and Nuclear agents



**Explosives** 



Forensic anthropology



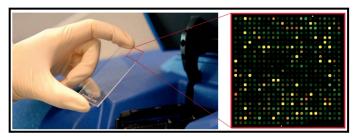
**Disaster Victim Identification** 



**Education and training** 



**Forensic respons** 



**Research and Development** 



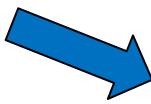
### Main measures CBRN-E program

- A. Risc assessment of the scene of crime. Collection of forensic evidence material at a extensive scene of crime, when necessary personal protection means, such as a gas suit with gas masks.
- B. The investigation of contaminated evidence material should either be done under specific conditions or the material should be decontaminated.
- C. Forensic investigations on CBRN-E agents









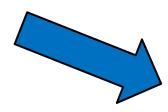


Identification of all Dutch and foreign victims within 3 weeks with the use of the DVI protocol and Bonaparte software!





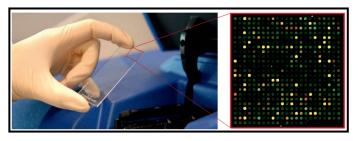




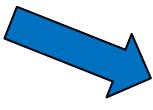


Assistence on the investigation of bomb attacks in Lebanon in the periode 2005-2009





**Research and Development** 



#### • <u>"Traditional" forensics</u>

- DNA, Fingerprints, Digital
- Decontamination procedures
- Analysis under special conditions

#### CBRN Profiling

- Investigation to the source
- Methodes
- Databases





## January 2011, Chemie-Pack fire

Chemical incidents is there a role for forensics?



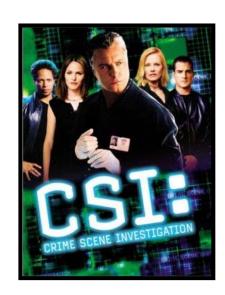




#### **Forensics**

### Scope:

- Chain of custody
- Profiling
- Traditional forensics
- Analysis of the effects related to the agents
- Data mining and data analysis
- Forensic Intelligence







#### Law Enforcement

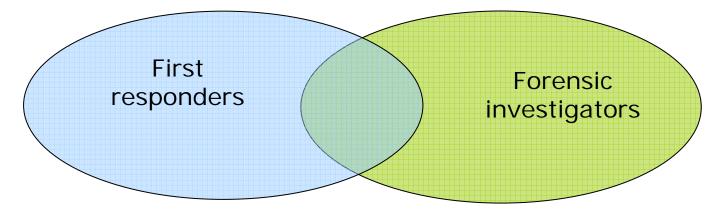
The results of the investigations should be accepted in Court of Law, therefore:

- Integrity of the evidence material should be documented from crime scene to court
- Responding and investigating staff should be educated, trained and proven competent
- The used methods are internationally accepted, proven and validated
- Reference materials and data should be available





## **Bringing response together**



- understanding of each others work
- developing protocols



## NFI – Academy and Field Lab









#### **Facilities**

- Classroom
- Mock court
- Forensic visualization, 3D-space
- Serious gaming
- Reconstruction space for simulation realistic incident scenes (train, metro, buildings, industrial plants etc)





#### Opleiding en training



















Opleiding en training

## CBRNe training programme

- Training forensic awareness
- Hazmat training
- Multi disciplinary response exercises
- Base class CBRN forensics
- Base class acting safe and with risk awareness







### **Proposals for the OPCW**

- forensic awareness training for first responders
- curriculum for forensic education and training
  - inspectors
  - both decision and policy makers
- handbook basic forensics for CBRNe incidents
- developing sampling methods for traditional forensics









B-agents



**RN-agents** 



explosives

## Thank you for your attention

for information please contact

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#### **Netherlands Forensic Institute**



