



National Institute for Public Health  
and the Environment  
*Ministry of Health, Welfare and Sport*

# The RIECO survey highlights & good practices

Lisbeth Hall M.Sc.  
Centre for Environmental Health  
RIVM

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# RIECO questionnaire

## Objectives:

- to survey capabilities and organisation for the assessment of effects on human health and the environment from (cross-border) industrial accidents in non-EU Parties and committed countries to the UNECE Industrial Accidents Convention

## Target group:

- (non-EU) focal points for the Convention; with help from colleagues if appropriate

The basis for questionnaire was that used in CERACI\* project

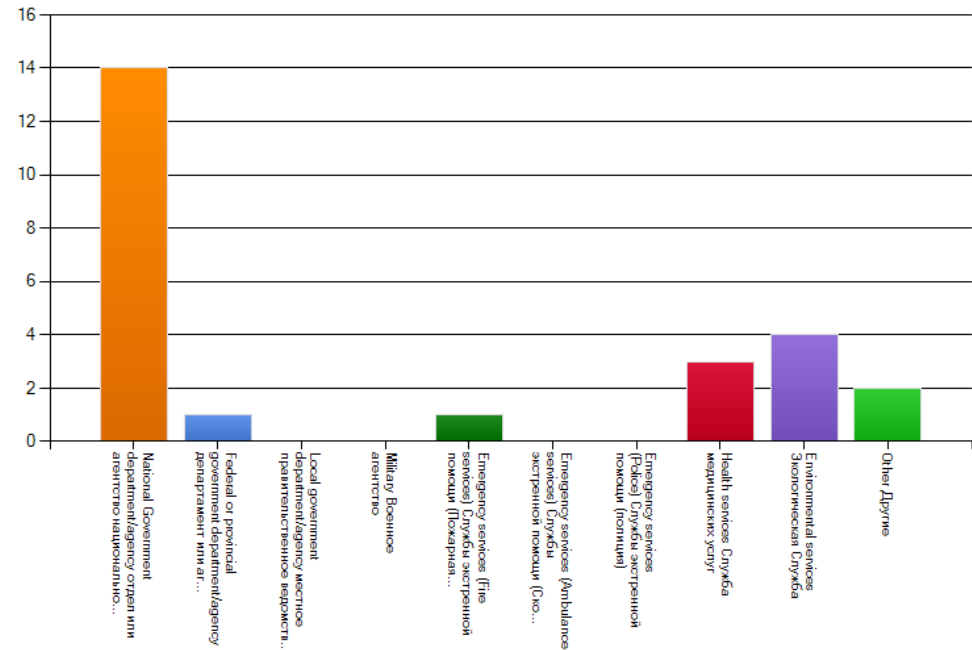
\* Grant Agreement No. 070401/2010/579055/SUB/C4



# Response and respondents

- Response rate = 80%
- 17 respondents (countries) started survey, 15 finished it
- 82% respondents from National Government
- 56% completed survey together with colleagues from other organisations (e.g. Public Health Institute)
- A few telephone interviews were conducted to increase response

Which type of organisation do you work for? Please choose all which apply: В какой организации вы работаете? Пожалуйста, выберите из предложенных

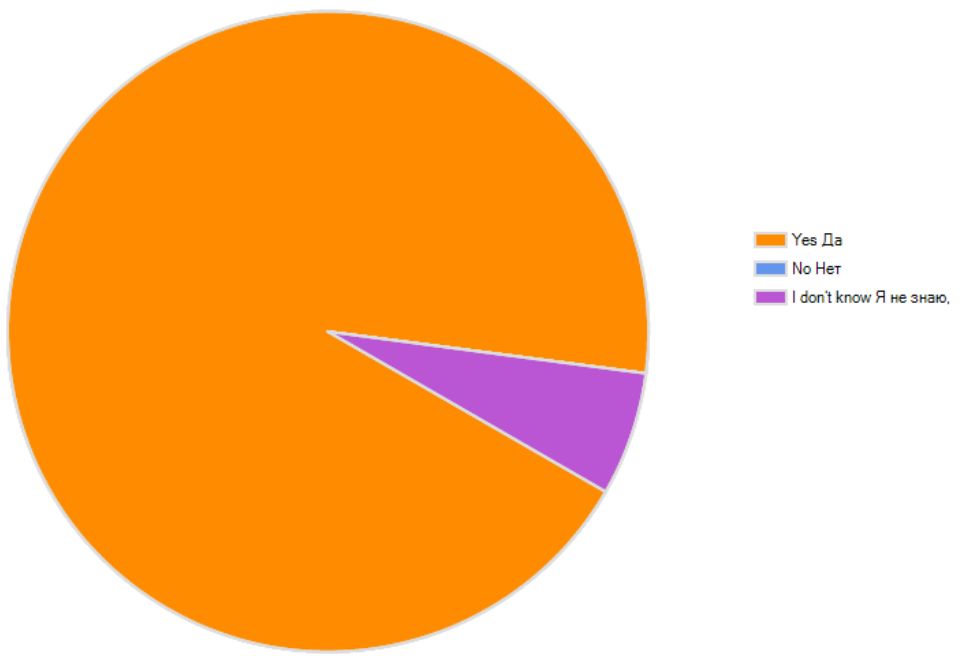




# Emergency plans and health sector involvement

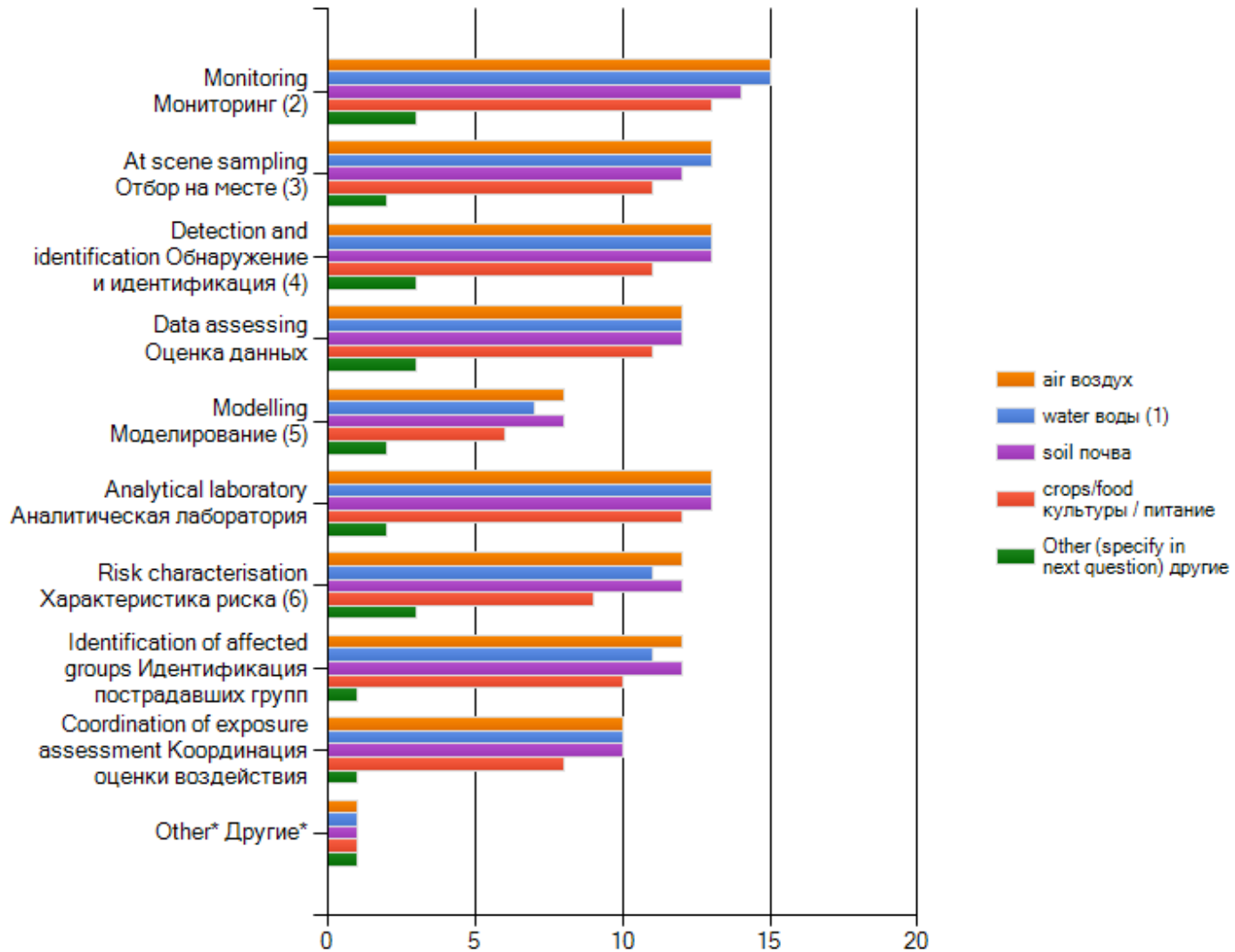
- Majority of countries have emergency plans (15/16)
- Health sector participation in development of plan: 87% 'yes'
- IHR obligations included in plan: 37% 'yes'

Are there any emergency preparedness, prevention or response plans in your country? Существует ли процедура готовности к чрезвычайным ситуациям, предотвращение или планы реагирования в вашей стране?





# Capabilities in exposure and risk assessment I





## Capabilities in exposure and risk assessment II

- Most respondents indicated that environmental monitoring is carried out **during** and **after** a major chemical incident
- 40% indicated availability of biomonitoring for health risk assessment
- 3/4 indicated availability of monitoring resource for air, water and soil **within emergency exclusionary zone**, for emergency response, 24/7 (ca. 50% for crops)
- 2/3 indicated availability of monitoring resource for air, water and soil **off site**, for assessing public exposure, 24/7 (ca. 50% for crops)
- Only ca. 50% indicated having a uniform methodology for risk assessment available at national/regional level
  - Unmet need?



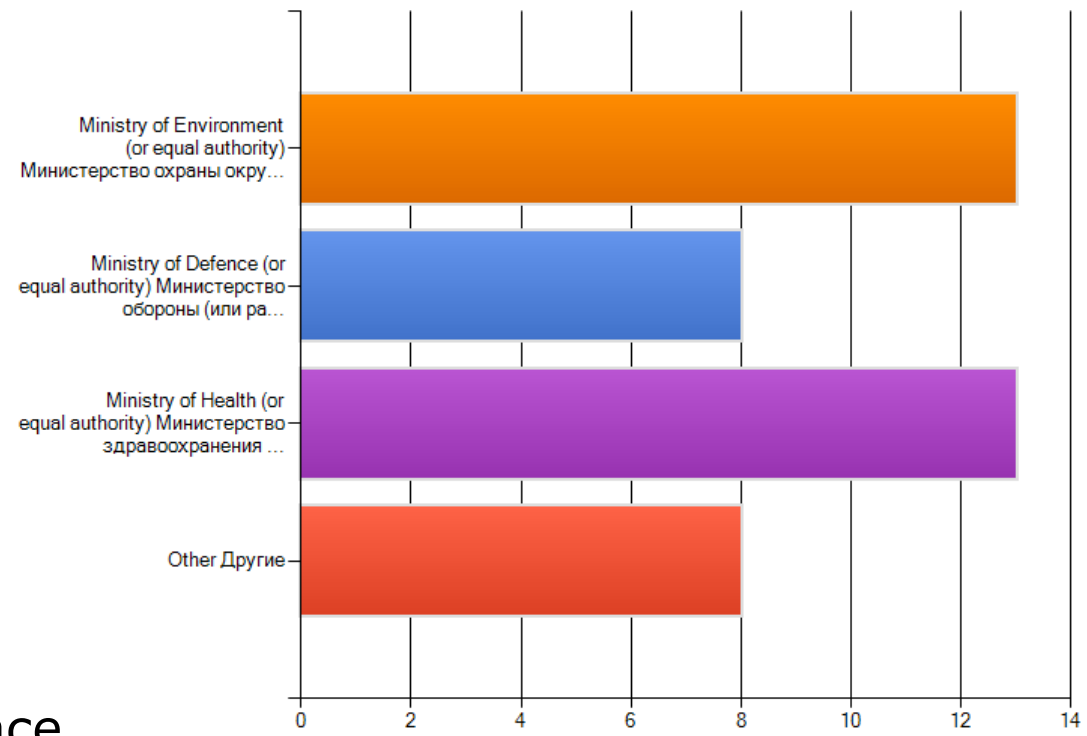
# Parties/National authorities involved in exposure and risk assessment

Other parties mentioned:

- Public Health Institutes
- Civil protection services
- Ministries of Agriculture, Justice, Interior
- Meteorological Offices
- Food authorities
- Universities

13/15 countries have an interministerial/interagency cooperation mechanism in place

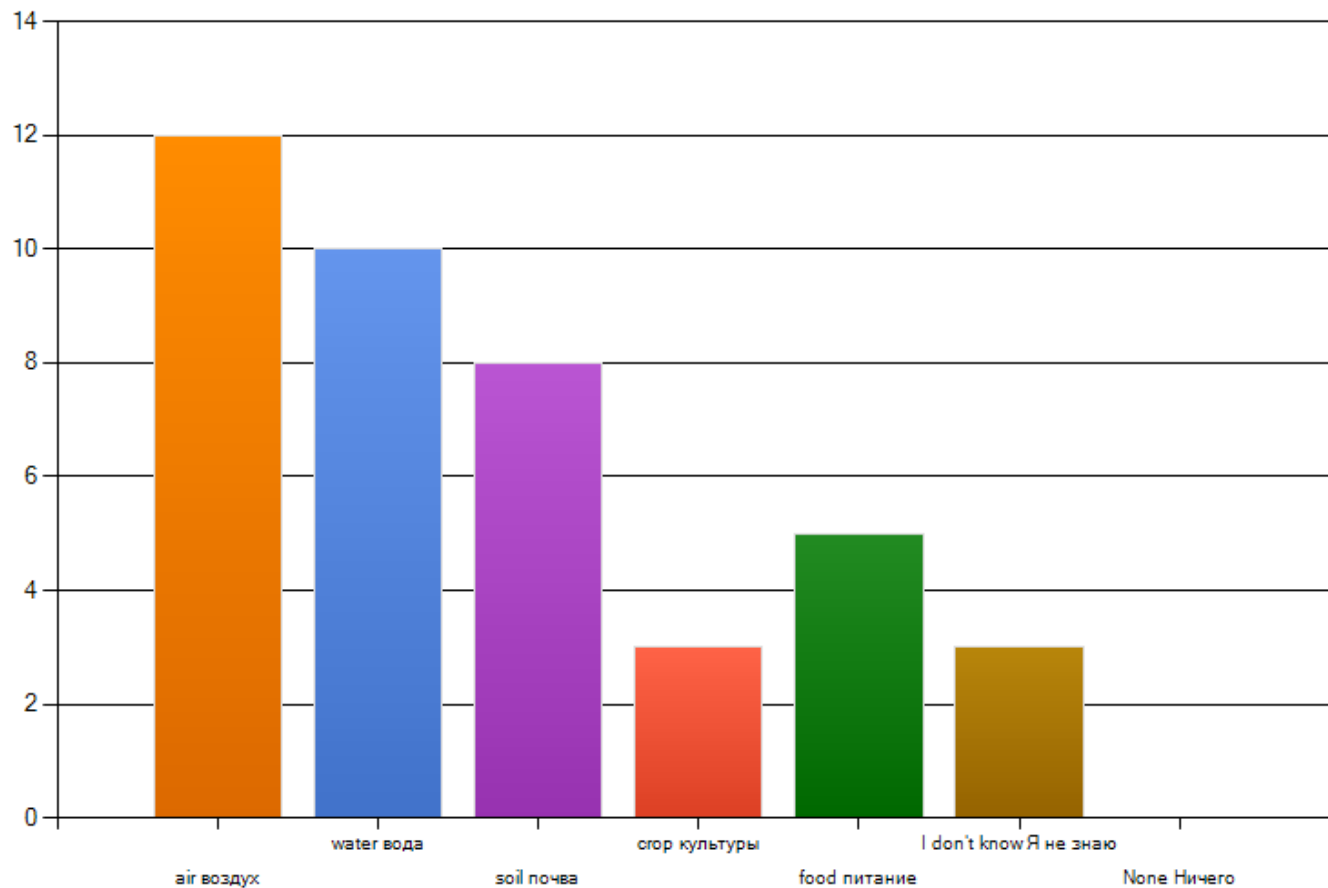
Which parties/national authorities are involved in exposure and health risk assessment (including communication)? Какие стороны / национальные органы власти, участвуют в воздействии и оценки риска для здоровья (в том числе в информировании)?





# Mobile detection and identification equipment

For which matrices are mobile detection and identification equipment available? Please choose all which apply. Для каких матриц мобильные оборудования для обнаружения и идентификации есть в наличии? Пожалуйста, выберите все, что применяется.



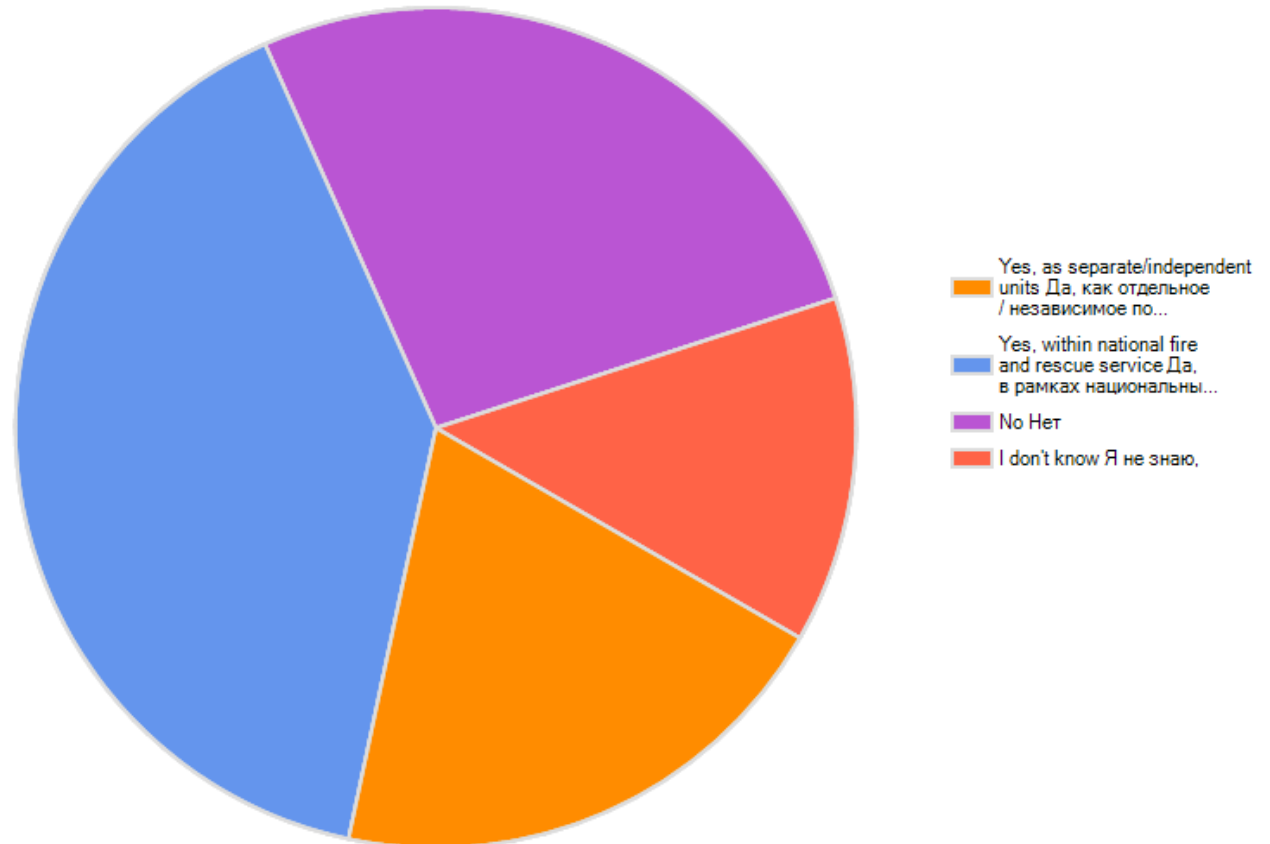




# HazMat teams: availability

Does your country have national HazMat teams to support exposure assessment? Есть Ли в вашей стране национальная команда для ОпМат для осуществления оценки воздействия?

- 9/15 'yes'
- 4/15 'no'

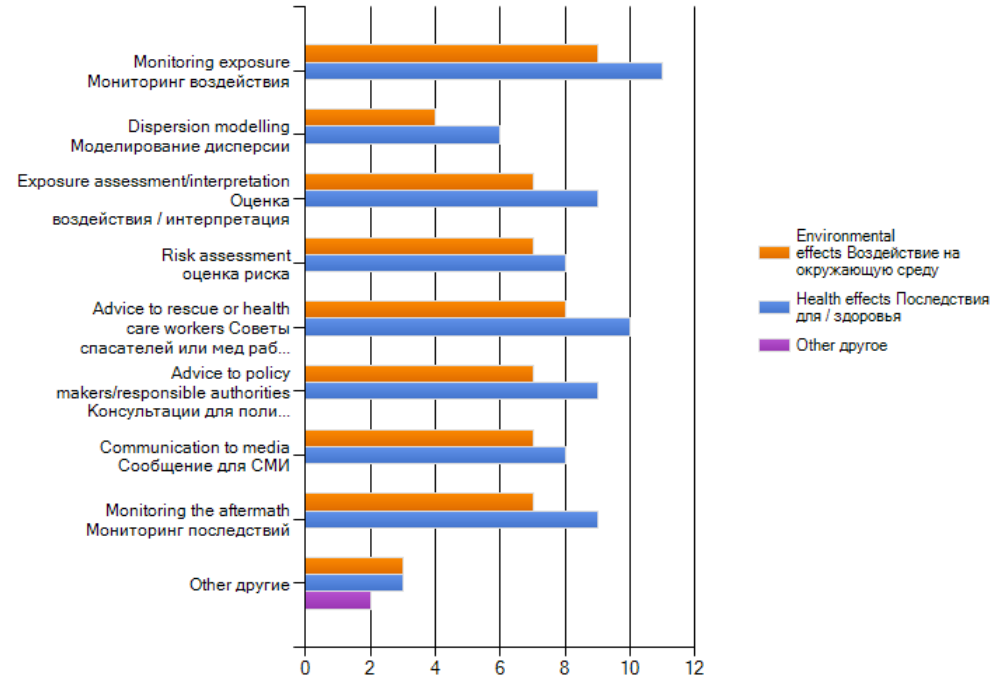




# HazMat teams: activities

- Greater focus on health than environmental effects
- Most focus on monitoring
- Least focus on dispersion modelling

What is the focus of the activities of the HazMat team(s)?  
Что находится в центре внимания деятельности групп(ы) опасных веществ?

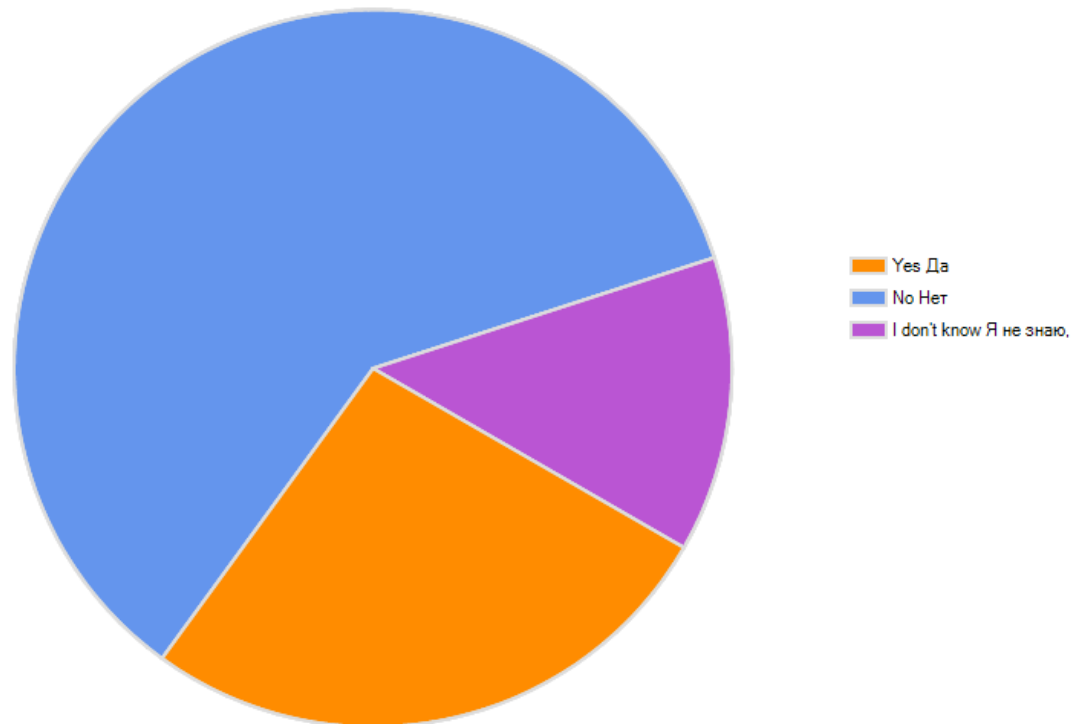




## Back office service availability

Does your country have back office service (office providing technical advise) for on site HazMat advisors in support of exposure assessment?  
Существует ли в вашей стране служба советников по ОпМат для предоставления оценки воздействия?

- Only 4/15 'yes'
- An unmet need?

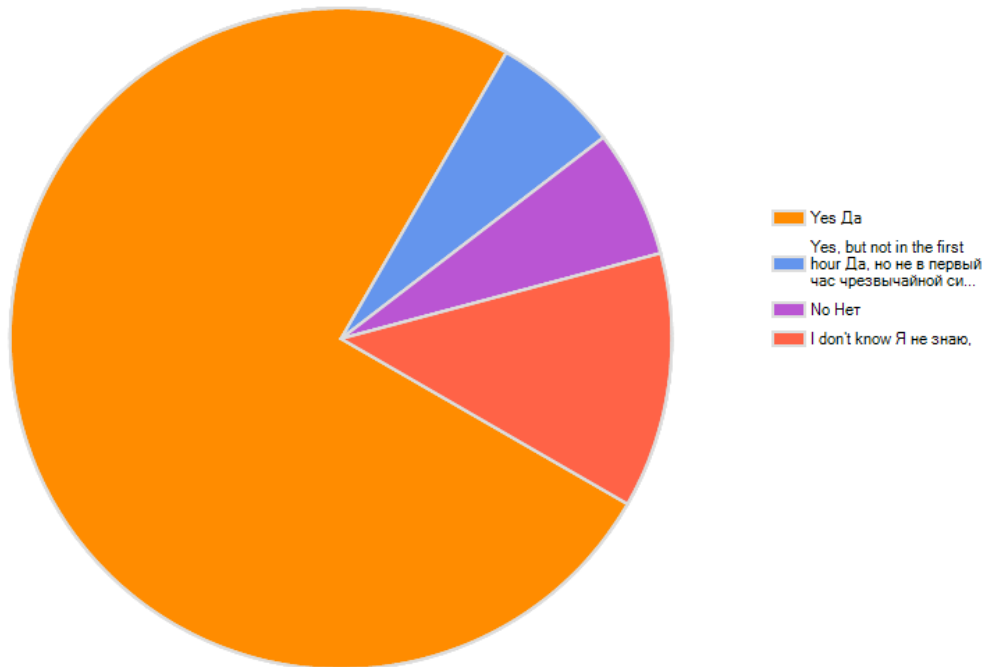




# Laboratory analysis for monitoring during incidents including first hour

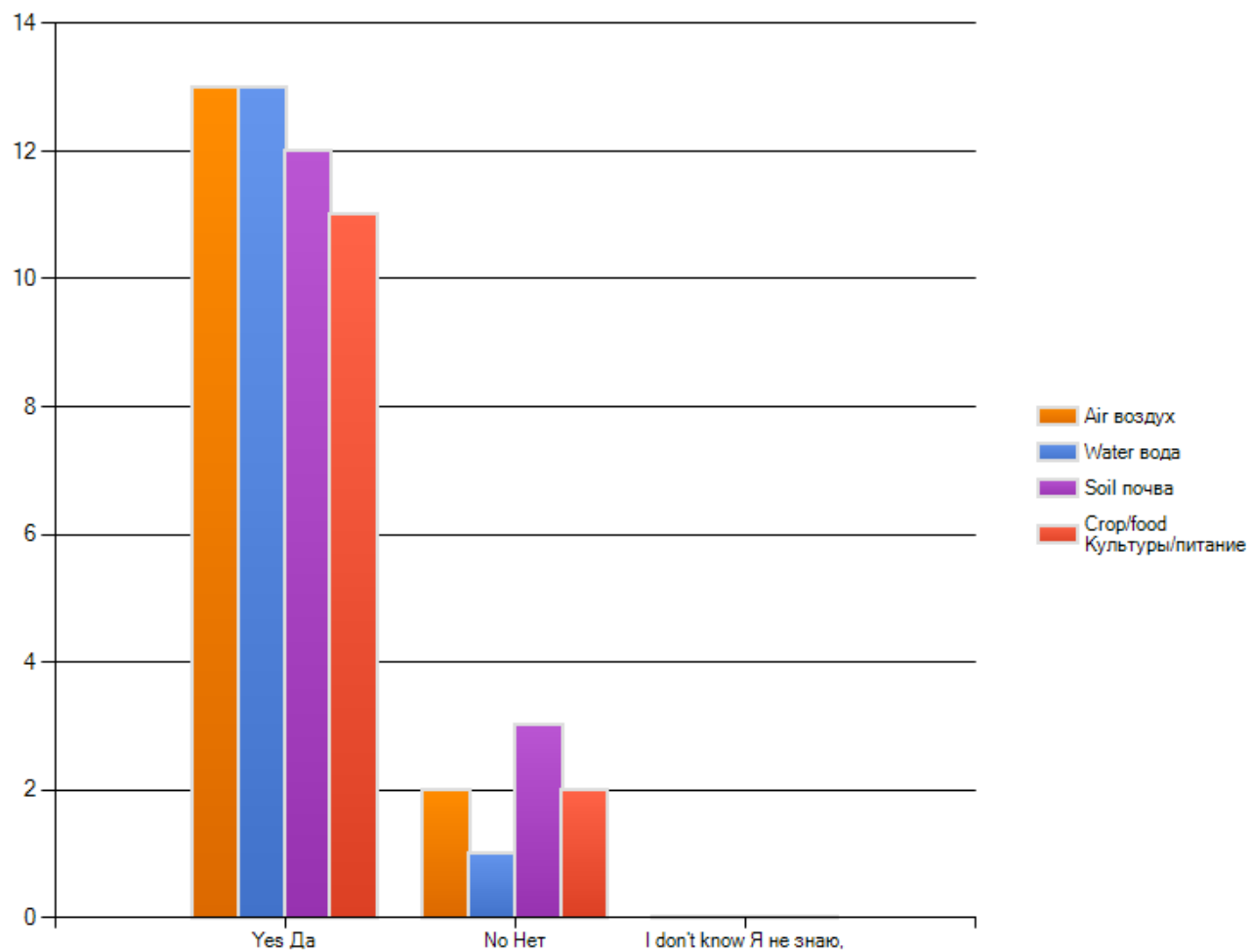
- 12/16 respondents said 'yes'
- Some limitations: geographical, technical, training

Can laboratory analysis be provided for monitoring during incidents, incl. during first hour after incident? Могут ли лабораторные анализы быть представлены для обследования во время инцидентов, включая анализы в течение первого часа после инцидента?





## National laboratory or (network of) laboratories

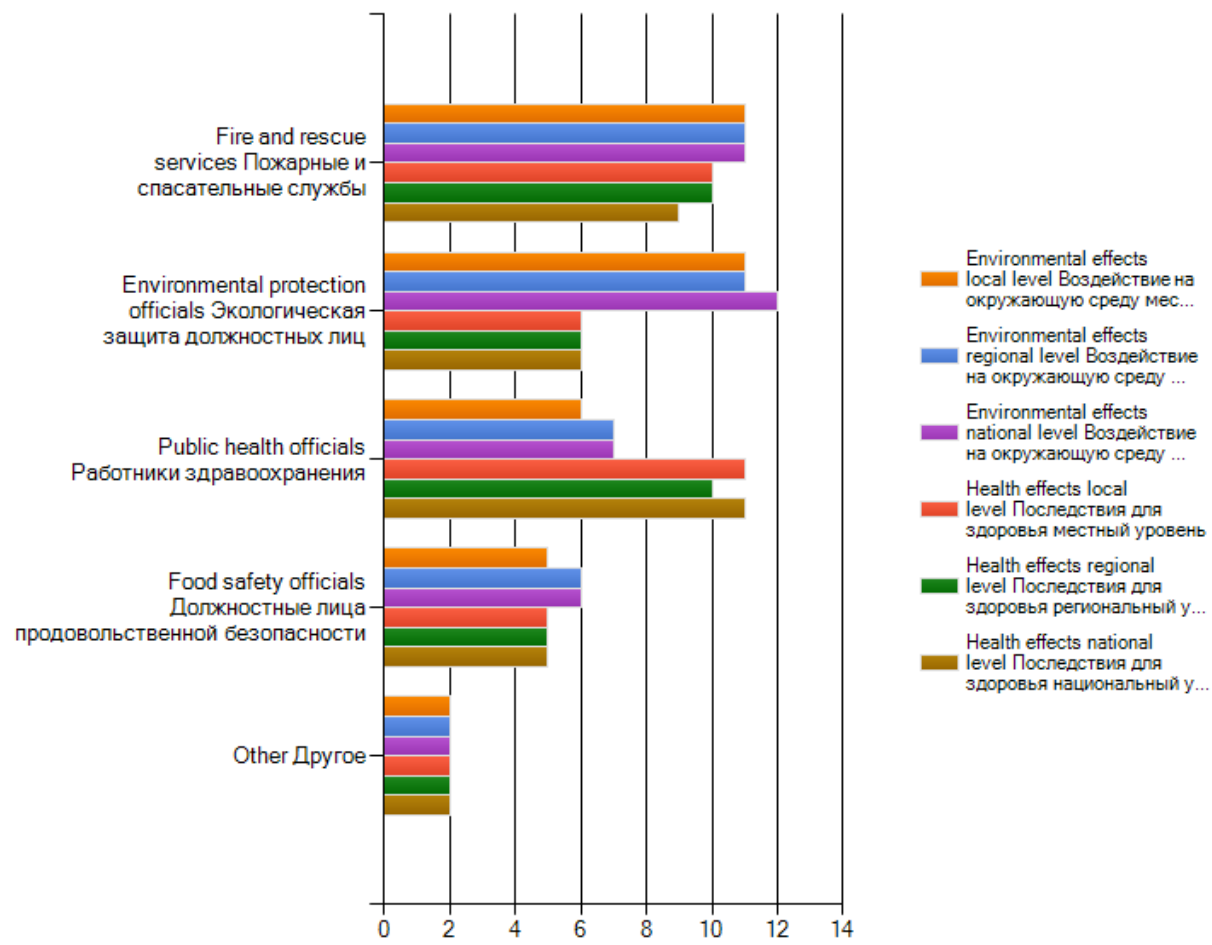




# Who receives data from DIM activities?

## Importance of:

- Procedures for data sharing
- Defined roles and responsibilities

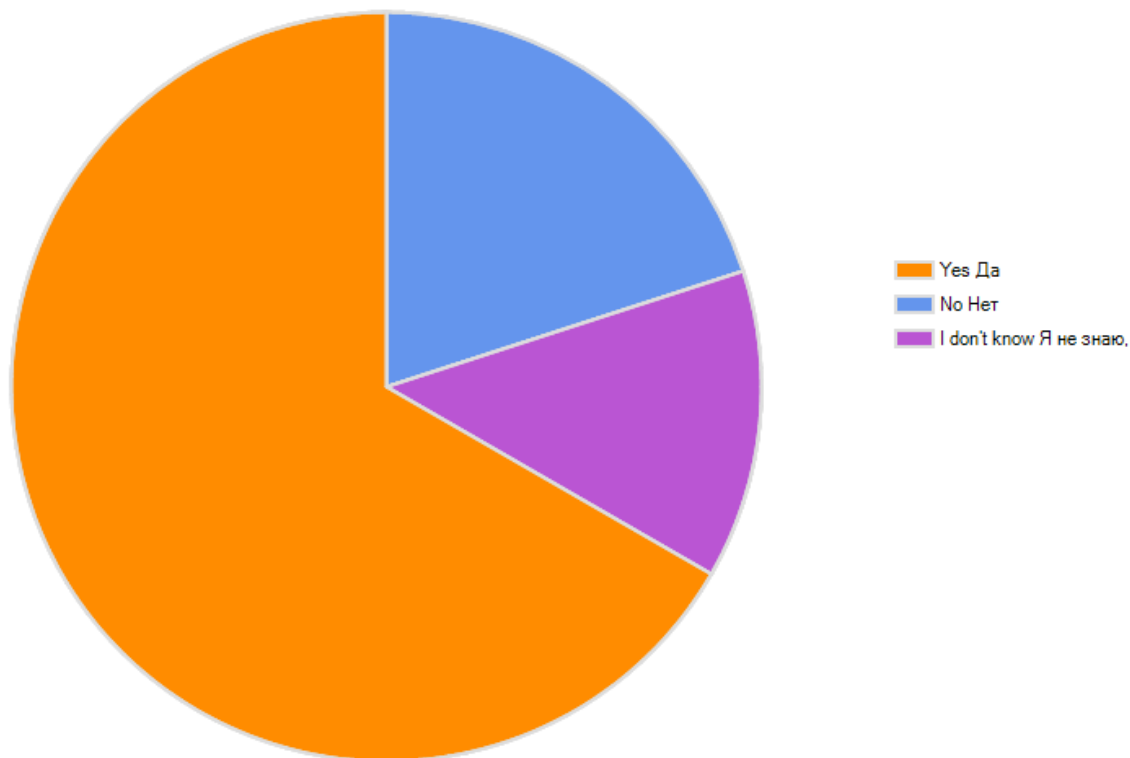




# Official information or documentation on guideline/limit values of chemicals

- 2/3 'yes'
- Unmet need for others?

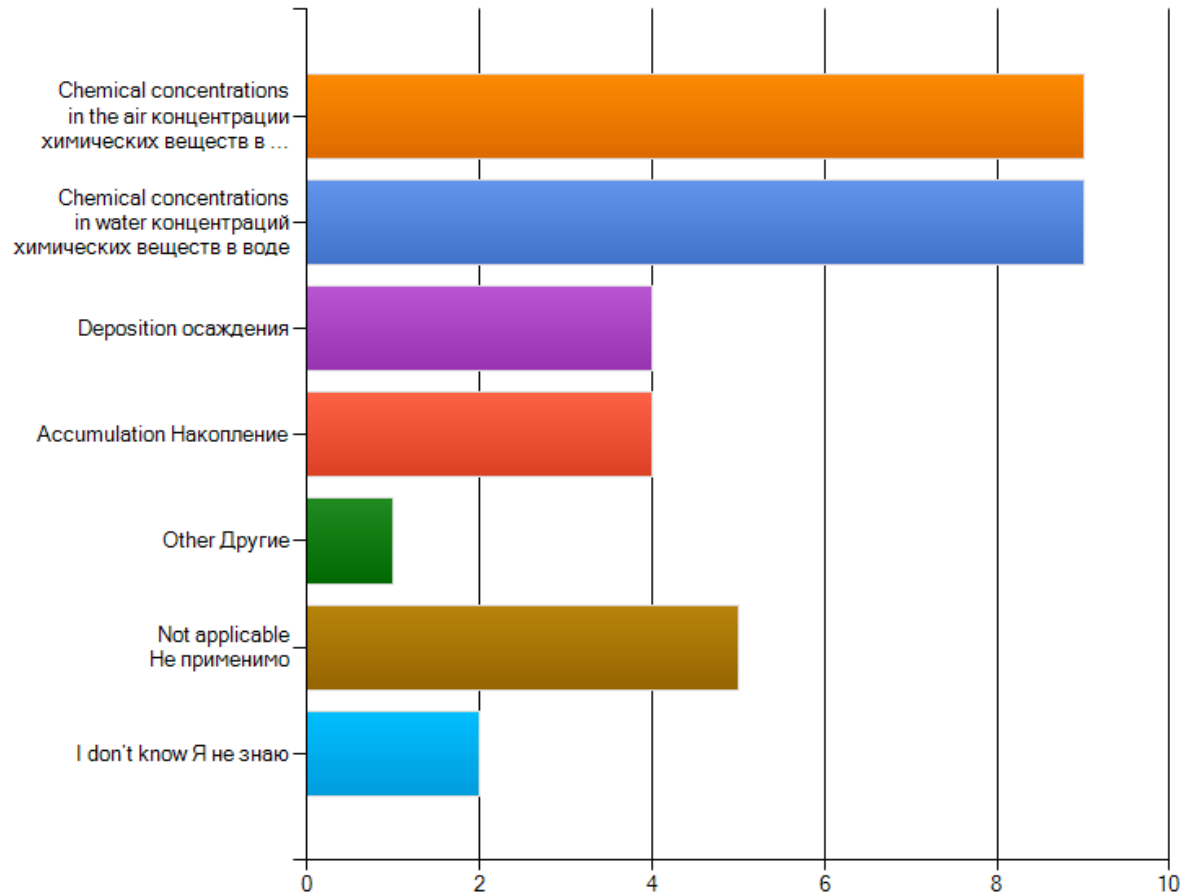
Are there any sources of official information or documentation on guidelines/limit values for chemicals in your country? Существуют ли какие-либо источники официальной информации или документации по руководящим принципам / предельные значения для химических веществ в вашей стране.





## Modelling outputs

- 60% can model concentrations in air and water
- Capability less well developed than monitoring
  - unmet need?

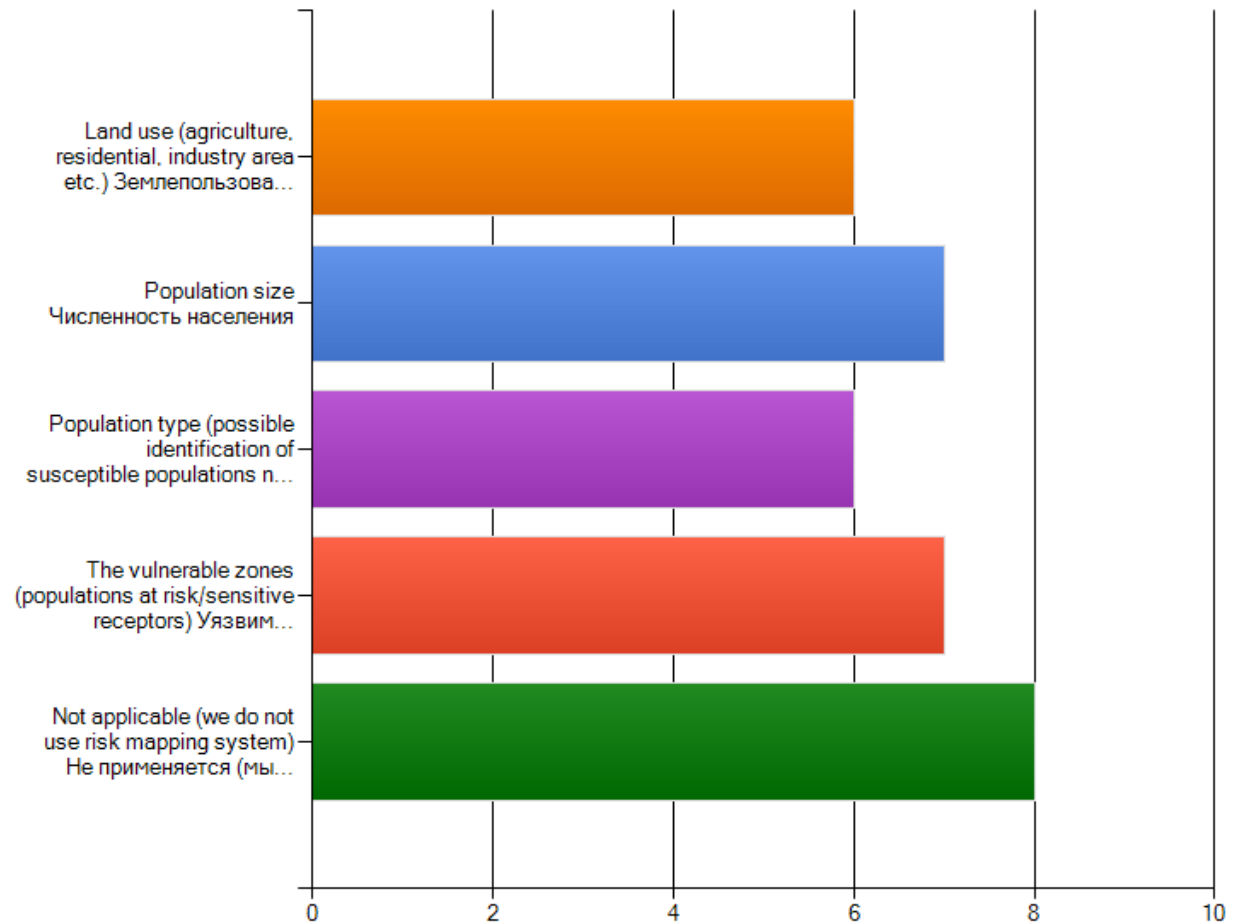






# Availability of GIS mapping to gather information on affected areas

- > 50% do not use GIS mapping  
– unmet need?





## International collaboration

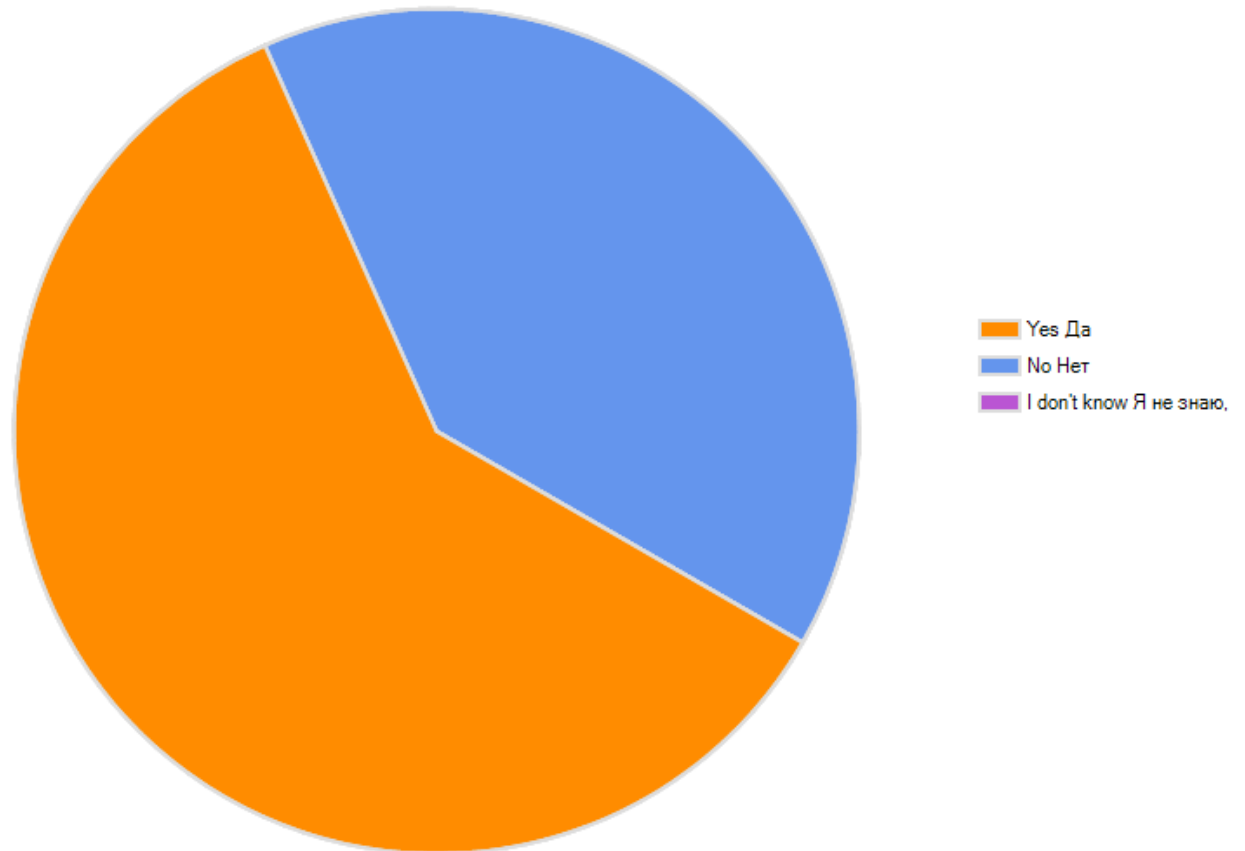
- Most countries (13/15) have official agreements with 1 or 2 other countries on:
  - Sharing expertise and means in case of incident
  - Information exchange during and after incident
  - Planning, training and exercising in preparation for incident
- 4/15 countries have mobile laboratory functions which support international response to chemical incidents
- 7/15 countries plan and carry out exercises with neighbours
  - 5/15 have evaluated the exercises with neighbours



# National crisis management plan for cross-border incidents

Is there a national plan for crisis management in relation to cross border incidents? Есть ли национальный план по урегулированию кризисов в связи с трансграничными инцидентами?

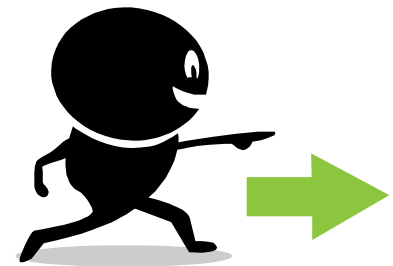
- 9/15 said 'yes'





## Strengths and opportunities for improvement

- Areas which seem sufficiently strong in most countries:
  - Monitoring capability (air, water & soil)
  - Laboratory analysis
  - Emergency plans
  - Agreements on international collaboration
  
- Areas which might need strengthening in some countries:
  - Modelling capabilities
  - Mapping capabilities
  - HazMat teams & specialist back office service
  - Uniform methodology for risk assessment
  - Information on exposure guideline values for chemicals





# Good practices in exposure and risk assessment





## Environmental monitoring capabilities

- Monitoring capabilities are available 24/7
- Fixed air and water quality monitoring stations
- (Semi)Quantitative monitoring in first hour of incident (e.g. via FRS)
- Deploying more advanced monitoring capabilities to scene within several hours
- Mobile laboratories for on scene chemical analysis capability
- Laboratory network for analysis support
- National laboratory networks cooperating across border
- Mobile laboratories able to cross borders





# Modelling and mapping capabilities

- Modelling capabilities available 24/7
- Using rapid models in initial stage of incident (quick & dirty)
- More complex (slower) modelling in subsequent stages
- Access to specialist meteorological organisations modelling transport and deposition of pollutants
- Geographical information systems to map at-risk sensitive receptor populations
- Local mapping of health complaints to adjust model outputs
- Present monitoring and modelling information using mapping outputs
- Include mapping of topography in preparedness plans





## The specialists

- Assessment by specialists 24/7 (including public health risk assessors)
- Back office with experts on call for technical support
- Dedicated website for sharing information & data between services
- Multi-agency face-to-face meetings in acute phase
- Including public health risk assessors in training and exercise events
- Use of toxidromes to recognise and characterise exposure
- Use of common approaches to risk assessment
  - e.g. use of Acute Exposure Guideline Levels
- Poisons Information Centre
- Specialist chemical trained first responders
- Cross-border HazMat teams







## Good practices in Cross-border Emergency preparedness

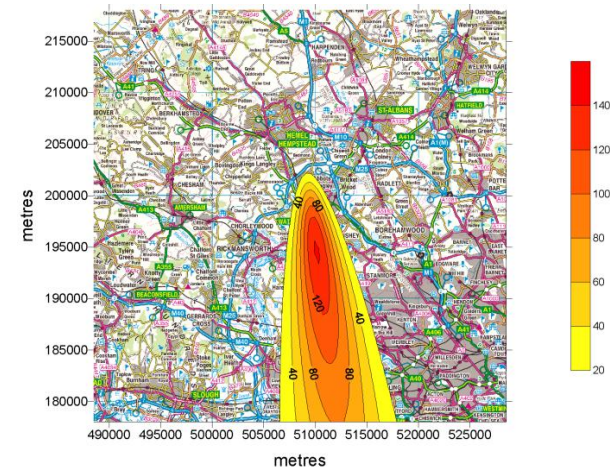
- Interagency training and exercising across borders
- Shared preparedness materials & response plans
- Bilateral or multilateral agreements, underpinned by detailed local & regional arrangements
- Focal points and defined points of contact
- Harmonised procedures and resources to facilitate collaboration
- Prioritise risks in cross-border planning and preparedness
- Agree consistent approaches for risk assessment, management and communication





# Good practices in Cross-border Emergency response

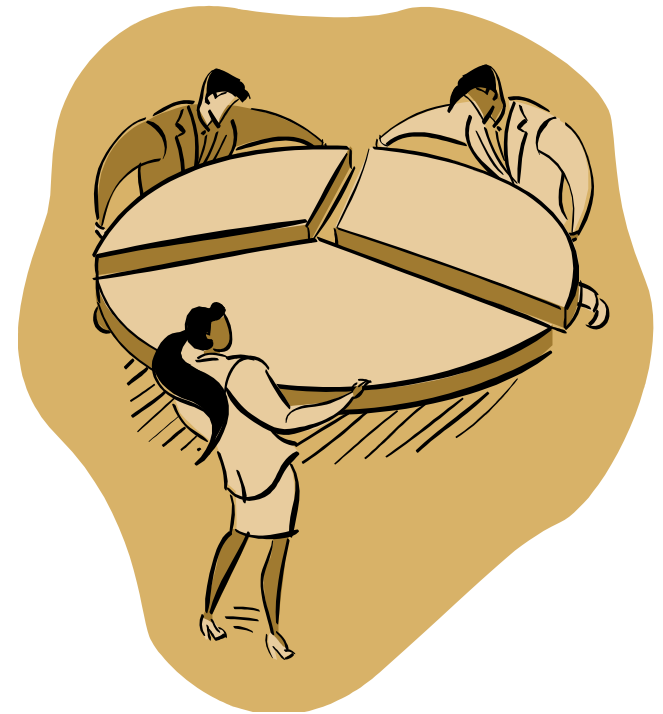
- International alerting and communication channels
- Cross-border links at both national and responder level
- Use of checklists and pre-prepared guidance
- Resources that cross borders to provide assistance, where requested
- Sharing of exposure and risk assessment information between counterparts
- Common approaches to risk assessment & communication, with sustained dialogue between incident managers across borders
- Debriefing after incidents and sharing of databases and information





# What about your Good Practices?

Please share them with us in the next session!





For more information:

[lisbeth.hall@rivm.nl](mailto:lisbeth.hall@rivm.nl)

[www.rivm.nl/ceraci](http://www.rivm.nl/ceraci)



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