SCORCH

Supportive Risk Awareness and Communication to Reduce Impact of Cross-Border Heatwaves

Heatwave preparedness in Europe

https://www.evaplan.org/eu-scorch/

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SCORCH: partners

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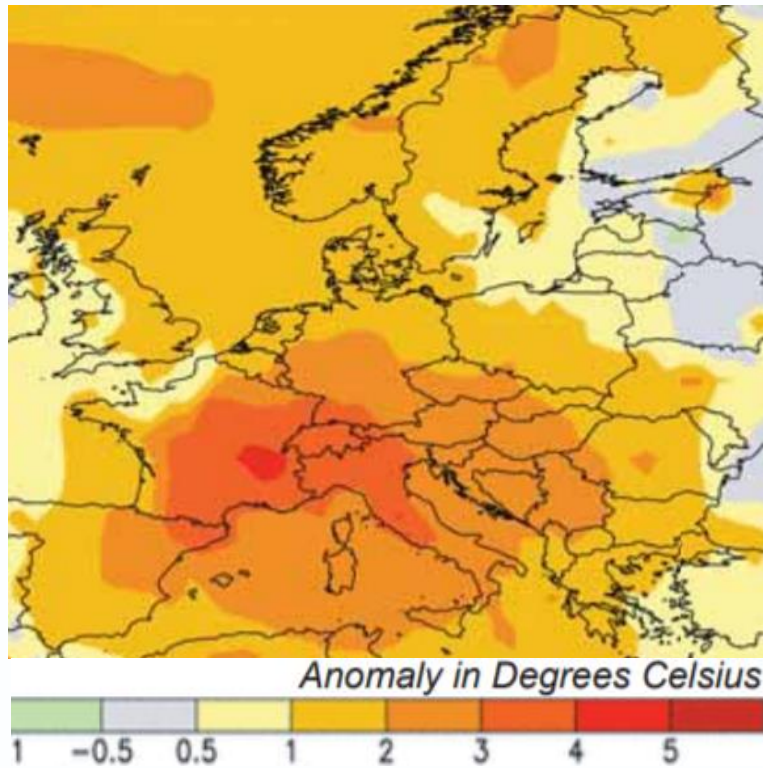
INCHES, the Netherlands

Tel Aviv University, Israel

National Centre for Disease Control and Public Health, Georgia

SCORCH: context

National heatwave plans in EU since 2003 heatwave

Anomaly in Degrees Celsius

UNEP (2004), impacts of summer 2003 heatwave in Europe

Excess mortality during summer 2003	
Belgium	1.175
France	19.490
Germany	9.355
the Netherlands	965
Portugal	2.696
Spain	15.090
Switzerland	1.039
United Kingdom	301

Overall in EU	**>70.000**

Robine et al. (2003) Death toll exceeded 70,000 in Europe during the summer of 2003, Comptes Rendus Biologies, Vol 331:2

SCORCH: objective

Reduce impact of heatwaves on populations in EU neighborhood, through:

1. Learning from EU plans and guidelines (WP2)
   - Overview national plans
   - Literature review
   - Key informant interviews
   - Critical analysis
2. Community-based surveys (WP3)
3. Improved risk communication strategies (WP4)

Data & methodology

Deliverable no.	Phase	Data	Countries	Method
D2.1	Overview national plans	16 national heatwave plans	16 countries: AT, BE, FI, FR, DE, IT, LT, LU, MK, NL, PT, ES, SE, CH, UK	desk analysis, thematic analysis in NVivo
D2.2	Literature review	27 articles	9 countries: BE, FR, DE, IT, NL, ES, PT, CH, UK	systematic literature review, thematic analysis in NVivo
D2.3	Interviews	68 interviews, 6-10 per country	9 countries: BE, FR, DE, MK, NL, ES, PT, CH, UK	semi-structured interviews, thematic analysis in Nvivo
D2.4	Critical analysis	Synthesis of findings from plans, literature, interviews	9 countries: BE, FR, DE, MK, NL, ES, PT, CH, UK	thematic analysis in Nvivo

Main findings:
national plans, literature & interviews

1. General

2. Heat warning system

3. Organisational scheme

4. Communication plan

5. Care for vulnerable groups

1. General

Objectives of national heatwave plan:

- to <u>prevent</u> negative health effects of heat
- to <u>raise awareness</u> on the health impact of heat
- to <u>coordinate</u> actions
- to <u>forecast</u> heat in a timely manner

→ focus should be on short and long term

Types of plans:

non-committal to enforceable

Use and familiarity of the plan:

- Local/regional stakeholders less familiar with national plan
- Local/regional stakeholders use adapted version/other plan
  - → National plan as blueprint

Priority of heat as a public health threat:

- Varies strongly
- Reasons for lower priority: resources, own mission and tasks, other threats, frequency of heatwaves

The problem is not the heat, the problem is the homelessness. (social institution, ES)

2. Heat warning system

Aim: to warn public and relevant stakeholders in a timely manner
Based on monitoring of certain parameters
Suggested improvements:

- Real-time data
- Access to data
- Monitoring techniques
- Include parameter
- Parameter thresholds

Parameters	BE	FR	DE	MK	NL	PT	ES	CH	UK
Air pollution		🟦		🟦		🟦			
Fire						🟦			
Indoor temperature	🟦🟥		🟦	🟦			🟦	🟥	🟦
Medical capacity		🟦	🟦	🟦	🟦	🟦		🟦	🟦
Morbidity	🟥	🟦	🟥🟥	🟦	🟥	🟦	🟥	🟦	🟥
Mortality	🟦🟥	🟦	🟥🟥	🟦	🟦🟥	🟦	🟦	🟦	🟦
Other parameters		🟦	🟦	🟦		🟦	🟦	🟦	🟦
Temperature	🟦🟥	🟦	🟦	🟦🟥	🟦🟥	🟦	🟦🟥	🟦	🟦
Other meteorological factors	🟦🟥	🟦	🟦	🟦🟥	🟦	🟦		🟦	🟦
Ozone levels	🟦	🟦	🟦	🟦		🟦	🟦		

2. Heat warning system

Alert levels:

- Level 0: preparedness
- Level 1: vigilance
- Level 2: hot weather
- Level 3: heatwave
- Level 4: emergency

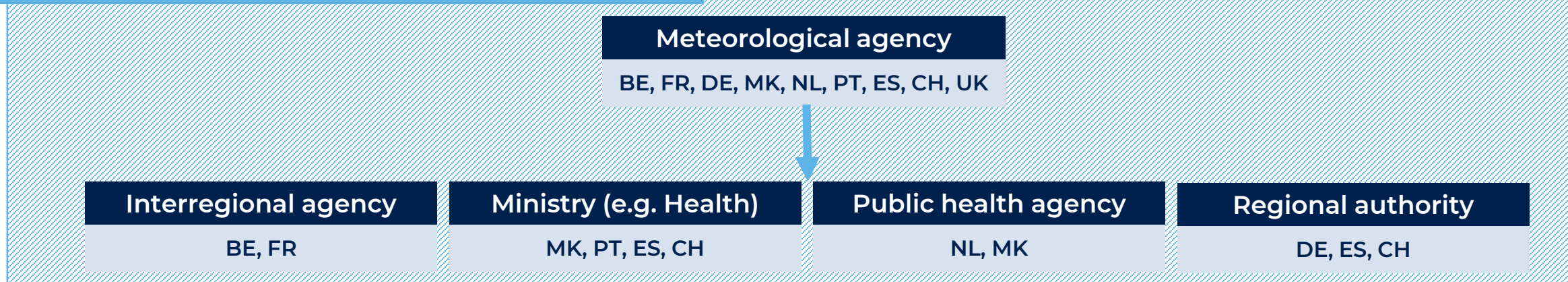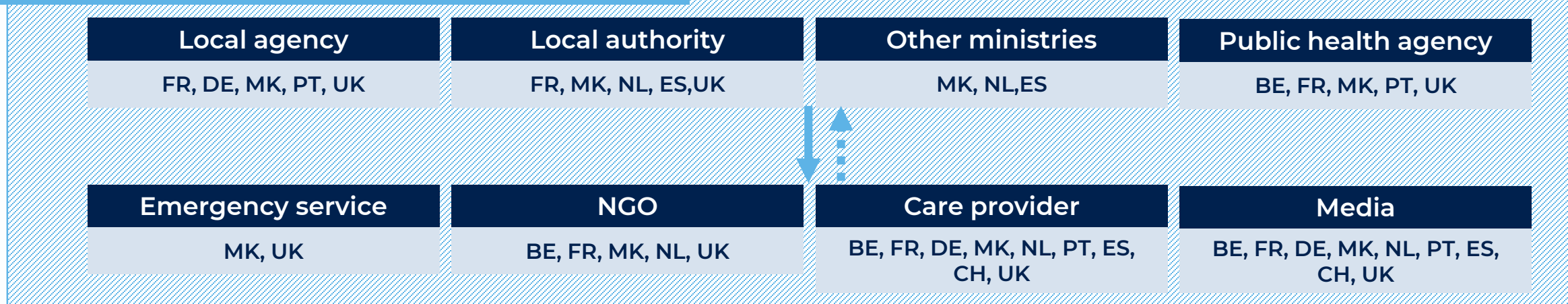| Alert level	BE	FR	DE	MK	NL	PT	ES	CH	UK
0	■	■	■	■					■
1	■	■		■	■	■	■	■	■
2	■	■	■	■	■	■	■	■	■
3	■	■	■	■	■	■	■	■	■
4	■	■		■			■	■	■

3. Organisational scheme

Possible roles:

- Author
- Activator
- Coordinator
- Informer
- Monitor
- Implementer
- Evaluator

1: author, activator, informer, monitor, evaluator

Meteorological agency
BE, FR, DE, MK, NL, PT, ES, CH, UK

Interregional agency	**Ministry (e.g. Health)**	**Public health agency**	**Regional authority**
BE, FR	MK, PT, ES, CH	NL, MK	DE, ES, CH

2: informer, monitor, coordinator, implementer

Local agency	**Local authority**	**Other ministries**	**Public health agency**
FR, DE, MK, PT, UK	FR, MK, NL, ES,UK	MK, NL,ES	BE, FR, MK, PT, UK

Emergency service	**NGO**	**Care provider**	**Media**
MK, UK	BE, FR, MK, NL, UK	BE, FR, DE, MK, NL, PT, ES, CH, UK	BE, FR, DE, MK, NL, PT, ES, CH, UK

General public	**Vulnerable people**

3. Organisational scheme

Clarity organizational scheme:

- Overall clearly described

- Issues:
  - lack of details can be solved with tailored local/organisational plans
  - lack of resources or autonomy
  - meed for coordinators
  - involve stakeholders in development

> *So, the plan is one of the many activities that we carry out and then even in terms of material resources, sometimes we have difficulty in responding to what is recommended in the Plan and to perform our role. (local agency, PT)*

3. Organisational scheme

Effectiveness of collaborations:

- Existing collaborations go well
- Possible improvements:
  - need for formal structures
  - recommendations on how to collaborate
  - more autonomy to establish collaborations
  - relations across sectors (beyond health sector)
  - better collaboration within the health system
  - cross-country collaboration to exchange expertise

4. Communication plan

Are all stakeholders informed?

- Not everyone is informed, issues are:
  - distribution of information
  - interpretation and use of information
  - awareness of heat risks, heatwave plan, organizational scheme
- Solution:
  - educate care providers (medical and other) and their staff

When I only have an emergency staff in the homes at the weekend, and then a heat warning. They don't know what that means, that people then ... have to drink more, that the interaction of the drugs can be different, [...]. (ministry, DE)

4. Communication plan

Is the general public informed?

- awareness is improving but not everyone changes their behavior
- lower awareness about vulnerable groups

- Solutions:
  - repetition
  - simultaneous use of multiple communication tools
  - involve schools and universities
  - use behavioural insights in communication strategies

Of course, people generally know what to do. But whether they behave differently? (public health agency, BE)

4. Communication plan

Are vulnerable groups informed?

- awareness is improving but not everyone changes their behavior
- low risk awareness regarding themselves
- some discard information

- Solutions:
    - adapt communication strategies
    - direct contact
    - easier messages

5. Care for vulnerable groups

How to identify vulnerable people?

- Overall, this is difficult
- How-to is not always sufficiently described within national plan
- Several strategies:
    - surveys by care providers or local authorities
    - care providers can identify vulnerable people through their services
    - demographic data available to authorities
    - records in health information systems
    - let vulnerable people apply to a register

5. Care for vulnerable groups

Monitoring and caring for vulnerable people:

- Requires identification first!

- Not always detailed within national plans

- Several options mentioned and implemented:
    - ambulant care (e.g. home visits, street teams)
    - exceptional interventions (e.g. remove person from home)
    - offer additional care services
    - informal care by family and community
    - provided cooled locations
    - tele-assistance (e.g. telephone calls)

Main findings:
towards a standard for heatwave plans?

Adapt/supplement WHO criteria for effective heatwave plan based on our findings

Criteria	Sub-elements
Organisational scheme	• identify and involve stakeholders from various sectors • define and assign roles and responsibilities in sufficient detail • involve relevant stakeholders when developing the plan • develop and write the plan in a continuous process • assign ≥1 activator(s) to activate the plan and/or alert levels • an activator must have the required authority and communication lines • plan activation includes decision making, communicating the activation and activating implementation • assign ≥1 coordinator(s) for inter-organisational coordination at all levels • a coordinator must have a good network and the required authority, skills and resources • …

Thank you for listening!

Questions?