



# CBRNe toolkit for policy makers: integrating vulnerable groups in preparedness and response

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# Summary

EU Member States lack a clear and coordinated approach to enhance societal preparedness and response to CBRNe (Chemical, Biological, Radiological, Nuclear and explosive) events that integrate the needs of vulnerable individuals. Based on preliminary results from the EU H2020 funded PROACTIVE project (Preparedness against CBRNe threats through common Approaches between security practitioners and the Vulnerable civil society), this policy brief recommends that EU policy makers should facilitate the development of coherent, evidenced-based guidance documents that include the needs of vulnerable citizens in three stages (before, during and after the event):

**Before CBRNe events**, policy making should focus on enhancing preparedness by educating people and raising public awareness with culturally appropriate, accessible information using multiple modes of dissemination and languages (e.g., pictograms, sign language). Attention on protected groups should be paid. Policy makers should also ensure uniformity among guidance documents and integrate information on the needs of vulnerable groups.

**During CBRNe events** policy makers should increase resilience toward misinformation and coordinate action of the practitioners involved in CBRNe response. Moreover, policy making should focus on ensuring that communication strategies implemented by first responders are effective, up to date, trustworthy, evidence-based, and consider vulnerable citizens' needs.

Policy making in **post CBRNe events** should favour the undertaking of post-event evaluation taking differential impact on vulnerable populations into consideration. Communication and ICT technologies used in CBRNe events should undergo assessment in order to enhance existing tools and methods.

# Problem

Many major cities across Europe have faced critical CBRNe related incidents over the past few decades. Furthermore, with terrorism threat levels high across the continent, the use of chemical agents by terrorist organizations has shown to be a significant risk (EUROPOL, 2019). Vulnerable individuals, such as people with mental or physical disabilities, older adults or children, are particularly exposed in this scenario. Preparation and response to CBRNe incidents based on equal treatment require designing and implementing policies targeted to vulnerable populations. First responders and CBRNe practitioners need clear, context-adaptable and well-structured guidelines and technologies to ensure their duties' efficacy. However, the literature has underlined the need for intergovernmental coordination in Europe and harmonizing response actions to ensure their efficiency (D1.1, D1.2).

**Moreover, policies and solutions are often limited in their capacity to integrate vulnerable groups behavioural and accessibility factors, which are relevant for ensuring fast and precise response.**

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# Background study results

## Current Situation

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- I. **Public understanding** of CBRNe prevention and management strategies is very low.
- II. **Emergency responders' guidance** and training often continue to endorse outdated and discredited **assumptions about crowd behaviour** (e.g., mass panic, public disorder) that focus on controlling rather than communicating with people.
- III. **There are discrepancies in CBRNe policies and guidance documents** within and between EU countries.
- IV. **There is extremely limited focus** placed on **managing the needs of vulnerable groups**.

## Factors influencing public compliance

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- I. **Prior knowledge** has been identified as a factor in increasing public compliance with recommended preventative measures. Further, information available to the public **during an incident**, regarding why and how they should comply, increases the level of compliance shown.
- II. **Trust in both spokesperson and source** are associated with increased compliance during an event, with an apparent preference for local sources over governmental or official communication. Trust, provision of information and emotional responses, can increase compliance with official instruction during incidents.
- III. **Demographic characteristics** including gender, location and level of education affect the rate of compliance with preventative measures in relation to CBRNe incidents.
- IV. **Public compliance** with recommended preventative methods may be affected by the **emotions associated with CBRNe incidents**. Anxiety can negatively affect the willingness to comply, whereas fear can motivate the public to comply with official instruction. Self-efficacy, response-efficacy and the ability to cope with the situation are all associated with how much agreement would be shown by the public.
- V. **The desire to seek out loved ones** during an incident and ensure their safety significantly affects public willingness to comply with protective measures.

# Issues and recommendations

The role of policymakers for CBRNe preparedness and response is to facilitate and boost practitioner's performance. This section identifies vital aspects to consider in this regard based on PROACTIVE preliminary results. Recommendations are organized according to the three critical stages of intervention, **preparedness, response and post-event recovery**.

**For each point we indicate  
the related PROACTIVE  
deliverables.**

# I

# Policy making in CBRNe incidents preparedness

Institutions involved in CBRNe preparedness must provide the technical and organisational **means for the implementation of CBRNe policies and tools.**

Issue	How to tackle	Action point for Policy Makers
#1 A legal and policy framework that effectively defines roles and responsibilities of all CBRNe practitioners is lacking ( <a href="#">D8.1</a> ).	Policies and procedures should facilitate normative clarity and inter-agency collaboration in line with DECISION (EU) 2018/199 and Rimpler-Schmid (2021).	#1 Policy makers must develop networked and coordinated procedures defining roles and responsibilities of CBRNe practitioners ( <a href="#">D2.5</a> ).
#2 General public understanding of CBRNe prevention and management strategies is shallow ( <a href="#">D1.1</a> ). Communication pre CBRNe event is vital for a successful outcome ( <a href="#">D1.2</a> , <a href="#">D5.1</a> ).	Pre-incident public info campaigns for CBRNe terrorism should be characterized by being easy to understand with the use of non-complex language, disseminated across multiple platforms, delivered by a credible source. This is vital to ensure the public is aware of pre-incident information and campaigns.	#2 Policy makers should put their effort into educating people on CBRNe events and raising awareness of their implications for vulnerable populations. Pre-incident information must be culturally appropriate, easy to understand and factual ( <a href="#">D1.1</a> ). Guidance and policy should be updated to incorporate a detailed communication strategy for how emergency responders should communicate with casualties and members of the public during a CBRNe incident ( <a href="#">D1.2</a> ).
#3 Guidelines are based on traditional and not up to date crowd behaviour data ( <a href="#">D1.1</a> ).	Policy makers should facilitate ongoing and interdisciplinary analysis and research on crowds' management. They should also facilitate resources to integrate this information into CBRNe preparedness tools.	#3 Guidance and policy should benefit from incorporating up-to-date evidence-based advice on how members of the public are likely to respond in a CBRNe incident, including psychosocial factors ( <a href="#">D1.2</a> ). Communication must incorporate psychological constructs that aim to reduce threat and anxiety and provide emotional and rational appeal ( <a href="#">D1.1</a> ).
#4 To maximize public engagement it is essential that these are pitched at an appropriate level to ensure the public can ensure maximum engagement with the material ( <a href="#">D1.3</a> ).	Messages should be pitched at an appropriate level in terms of language and complexity.	#4 It is recommended to adopt layman's terms in regards to language and complexity and integrate them into preparedness policy materials ( <a href="#">D1.3</a> ).
#5 The public prefers written communication due to its concrete nature and the fact that it can't be retracted once provided ( <a href="#">D1.3</a> ).	Information should be available in writing (i.e., print form), where possible, using non-complex language.	#5 Policy makers should ensure that, where possible, information is available in writing using non-complex language ( <a href="#">D1.3</a> ).
#6 Information should be pre-planned in order to ensure prioritization and consistency between organizations, provide uniformity and advocate cohesion between agencies and work practices ( <a href="#">D1.3</a> ).	Pre-planned information addressing all potential scenarios must be the strategic approach.	#6 Policy makers must facilitate pre-planning between agencies and organizations to ensure consistency ( <a href="#">D1.3</a> ).
#7 Guidance and recommendations are not necessarily consistent, even within countries (e.g., decontamination duration) ( <a href="#">D1.2</a> , <a href="#">D1.3</a> ).	Guidance documents should seek to be uniform in instruction, particularly when released in the same country.	#7 Policymakers should improve overall response by sharing uniform instruction materials, plans and best practices (i.e. in the form of hypothetical scenarios) to achieve a consistently high level of preparedness in their territory/ power domain ( <a href="#">D1.3</a> , <a href="#">D2.4</a> ).
#8 There is a need for a greater focus placed on managing the needs of vulnerable groups in guidance documents to ensure that the needs of these individuals are met ( <a href="#">D1.1</a> , <a href="#">D1.2</a> , <a href="#">D1.3</a> , <a href="#">D2.5</a> , <a href="#">D3.4</a> ).	Producing new official materials and standards on preparation actions for preventing and managing harm on vulnerable populations in CBRNe events.	#8 Guidance and policy should include a clear strategy on how to manage vulnerable groups in a CBRNe incident. This includes both communication and response plans adapted to these groups ( <a href="#">D1.2</a> , <a href="#">D3.3</a> ). Policy and guidance should ensure that response strategies meet the needs of vulnerable groups without placing them at a disadvantage because of their vulnerability ( <a href="#">D1.2</a> , <a href="#">D3.3</a> ).
#9 There is a need to ensure equal treatment and maximum public engagement with information ( <a href="#">D1.3</a> ).	Information should be provided in multiple languages, pictographic form, and sign language.	#9 Where possible, information should be fully accessible for all (e.g. in terms of language and format) ( <a href="#">D1.3</a> ).

# 2 Policy making in CBRNe incidents response

Public institutions' role regarding response protocols during a CBRNe event is to intervene in incident **communication, ensure technical availability, and often coordinate practitioners** involved. Other relevant tasks include support for family reunification. Coordination between different stakeholders (first responders, LEAs, etc), including those related to vulnerable populations (e.g. social services and civil society organisations), is crucial for the effectiveness of the response strategy.

Issue	How to tackle	Action points for Policy Makers
<p>#1 Communication employed does not take into account evidence-based recommendations for inclusive crisis communication (<a href="#">D1.1</a>, <a href="#">D1.2</a>, <a href="#">D2.2</a>, <a href="#">D3.4</a>).</p>	<p>Apply existing recommendations such as the ones mentioned in the <a href="#">COVINFORM-PROACTIVE Whitepaper</a>.</p>	<p>#1 Ensure CBRNe guidance documents comply with the evidence-based crisis communication recommendations.</p>
<p>#2 There is a need to ensure first responders can meet the needs of minority groups in the context of a CBRNe incident (<a href="#">D2.5</a>).</p>	<p>Policies and procedures for managing CBRNe incidents should remain culturally appropriate and be respectful of religious values.</p>	<p>#2 Policy makers must foster institutional action to ensure that CBRNe management adequately addresses cultural factors (i.e., language barriers) (<a href="#">D1.3</a>).</p>
<p>#3 There is a need to ensure that first responders can meet vulnerable groups' needs, as both guidance and literature contain limited information about the management of members of vulnerable groups during CBRNe incidents (<a href="#">D1.1</a>, <a href="#">D1.2</a>, <a href="#">D2.2</a>, <a href="#">D3.4</a>).</p>	<p>Guidance documents should inform responders about the needs of vulnerable groups and include plans for dealing with such groups in the case of a CBRNe incident.</p>	<p>#3 Policy makers must develop strategies to incorporate information and protocols relating to the needs of vulnerable groups and implement plans for dealing with such groups in the case of a CBRNe incident. This includes mechanisms to ensure safety for vulnerable populations (i.e. persons with physical disabilities) (<a href="#">D1.3</a>, <a href="#">D2.2</a>, <a href="#">D3.3</a>).</p>
<p>#4 There is a lack of consideration in current policy and practices for supporting animals (<a href="#">D1.3</a>, <a href="#">D2.2</a>).</p>	<p>Policies and procedures for managing CBRNe events should include plans on how to deal with support animals.</p>	<p>#4 Policy makers must implement procedures and coordination strategies with corresponding agencies for dealing with support animals in case of CBRNe events (<a href="#">D1.3</a>, <a href="#">D2.2</a>).</p>

# 3 Post CBRNe incidents policies

The role of public institutions in the recovery from a CBRNe event is to perform continuous policy assessment and ensuring that the lessons learnt are actively applied in all guidance and policy documents.

Issue	How to tackle	Action points for Policy Makers
<p>#1 There is a general lack of post-event evaluation and analysis by official institutions beyond LEAs and practitioners (<a href="#">D8.2</a>).</p>	<p>Evaluation of CBRNe policies must take from incident response experience to further enhance existing tools, policies and methods.</p>	<p>#1 Produce support strategies for first responders and civil society organizations to address post-event mitigation strategies, including communication with the media. Tabletop exercises, focus groups, and workshops with LEAs' and civil society organizations' participation should be coordinated by public institutions. Issues limiting the applicability of guidelines used in specific cultural contexts, such as linguistic barriers or the implementation of decontamination protocols for some religious groups, should be discussed in these meetings (<a href="#">D8.2</a>).</p>
<p>#2 Performance of communication and ICT technologies used by public actors in CBRNe events is not assessed (<a href="#">D8.2</a>).</p>	<p>Technological systems used for coordinating response scenarios should also be evaluated.</p>	<p>#2 Regularly assess technology governance, including relations to all stakeholders involved, addressing LEAs, first responders, social organizations and the media. System performance should be analysed in these sessions to integrate stakeholders' perceptions into technological toolkits and protocols.</p>



# Conclusion

We have found that public understanding of CBRNe events preparedness is low and that there are discrepancies on CBRNe guidelines between and within EU countries' policies. Furthermore, there is a lack of focus on vulnerable people. Building on our findings, we recommend that EU countries consider **adopting standard high-level policy documents and guidelines**. These instruments should guide CBRNe stakeholders on how to effectively communicate, act, coordinate themselves and deal with the needs of vulnerable citizens pre, during and post CBRNe events. To achieve this, **we recommend that policymakers provide capacity to allow CBRNe public management** to be based on up-to-date evidence, integrate cultural and psycho-social factors, identify vulnerable citizens' needs, and build resilience toward the misinformation. Furthermore, a **post-event systematic assessment** would favour an iterative policy process that would, in turn, guarantee efficient and up to date practices. One of the outstanding challenges is the coordination of the action between different stakeholders involved in the management of CBRNe events.

To address this, national governments could establish a forum where civil societies, LEAs, and other practitioners involved in CBRNe events regularly engage with each other on issues and practices.

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