



World Health
Organization

REGIONAL OFFICE FOR Europe

Report

Exercise **JADE**

2018



Report

Exercise **JADE** 2018



In November 2018, the Health Emergency Programme (WHE) at the WHO Regional Office for Europe conducted a functional simulation exercise called Exercise JADE (Joint Assessment and Detection of Events). This report includes a summary of the exercise, feedback and evaluation data, as well as recommendations for future exercises.

Address requests about publications of the WHO Regional Office for Europe to:

Publications
WHO Regional Office for Europe
UN City, Marmorvej 51
DK-2100 Copenhagen Ø, Denmark

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office website (<http://www.euro.who.int/pubrequest>).

Keywords

JADE EXERCISE, IHR
EMERGENCY PREPAREDNESS
SIMULATION EXERCISE
MONITORING
EVALUATION FRAMEWORK

© World Health Organization 2019

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. The views expressed by authors, editors, or expert groups do not necessarily represent the decisions or the stated policy of the World Health Organization.

Contents

1. Summary.....	v
2. Acknowledgements.....	vi
3. Introduction.....	1
The role of National IHR Focal Points	1
4. Exercise JADE.....	2
4.1 Objectives	2
4.2 Exercise Dates.....	2
4.3 Participation.....	3
4.4 Preparations	4
4.5 Exercise management team.....	4
5. Observations and Recommendations.....	5
6. NFP Feedback And Evaluation.....	13
6.1 General observations from participants	13
6.2 Results of the evaluation survey	14
7. Conclusions.....	17
Annex 1: Exercise JADE Scenario outline.....	18



“The exercise was very well organized and fun! We look forward to the next one!”



1. Summary

The role of the National International Health Regulations (IHR) Focal Point (NFP) in ensuring that public health risks are effectively notified to WHO, verified when requested, and consequently responded to under the IHR (2005) is critical. Indeed, the identification and equipping of the NFP in fulfilling this function is mandatory for all States Parties and laid out in Article 4 of the IHR (2005). This function is well-established in the European Region, yet many IHR NFPs rarely have the opportunity to practice notification, consultation and verification due to the absence of public health emergencies of potential international concern occurring in their countries. Furthermore, at the moment, there is no standing platform for ongoing exchange of knowledge and practice between NFPs in the European Region.

WHO supports Member States to ensure the regular cross-sectoral assessment of country capacities as required under the IHR (2005). This is done through support for national assessments, risk profiling, after action reviews and simulation exercises as well as building monitoring and evaluation capacities through trainings.

In order to practise operational communication under the IHR (2005) and skills and procedures required of the NFP, the Joint Assessment and Detection of Events (JADE) simulation exercise was organized in November 2018 by the WHO Regional Office for Europe (EURO). This functional exercise practised collaboration between the NFPs and the WHO Regional IHR Contact Point. Exercise JADE simulated an outbreak of unknown origin and, as the situation developed, participating NFPs were expected to practise elements of emergency risk communication, notification and information exchange with WHO, as per IHR (2005) and related procedures, and demonstrate the ability to work across relevant sectors.

Exercise Jade was modelled around exercise CRYSTAL conducted yearly in the WHO Regional Office for the Western Pacific (WPRO) since 2008.

Twenty-seven (27) NFPs participated in two five-hour exercises: 17 English speaking NFPs on 13 November and 10 Russian speaking NFPs on 15 November, 2018. During exercise JADE over 648 emails messages were exchanged by NFPs and WHO IHR Regional Contact Point.

Overall, participants showed a strong application of the requirements and procedures necessary to fulfill their roles as NFPs, particularly with respect to the notification, verification and information exchange with WHO Regional IHR Contact Point. Likewise, in the area of emergency risk communication, most NFPs demonstrated their role in developing statements and communication materials and of using formal and informal procedures for internal communication and coordination. Finally, most NFPs also demonstrated the ability to coordinate with food safety authorities and displayed experience of working across sectors.

Main recommendations can be found in the report below, organized by objective.

2. Acknowledgements

WHO Health Emergency programme (WHE) for the WHO Regional Office for Europe (EURO) is grateful to the NFPs for participating in this first edition of Exercise JADE, including for providing feedback on the exercise. EURO is committed to improving the exercise and to keeping it engaging, interesting and challenging in the future.

WHE EURO would like to thank WHE WPRO for giving us the opportunity to learn from the extensive experience in organizing Exercise CRYSTAL. This proved to be invaluable. We would also like to thank WHO Headquarters (HQ) Country Health Emergency Preparedness and IHR Department for providing continuous support in the design, development and execution of the exercise JADE.

Finally, WHE EURO is grateful to the Russian Federation for providing financial support for the organization of Exercise JADE.



Exercise JADE team in Greece



3. Introduction

The International Health Regulations (IHR) are an international agreement, legally binding on 196 countries across the globe, to work collaboratively with each other and with WHO to prevent, protect against, control and respond to the international spread of disease. The IHR entered into force on 15 June 2007.

The IHR (2005) lays the foundation for operational communications and coordination between State Parties and WHO in the detection, assessment and management of a public health event.

The role of National IHR Focal Points

IHR (2005) Article 4 requires that each state party designates or establishes a National IHR Focal Point (NFP) with authorities responsible within its respective jurisdiction for the implementation of requirements under IHR (2005). The NFP shall be accessible at all times and is responsible for communication with the WHO concerning public health events that are relevant under IHR.

The IHR (2005) describes several modalities for event based communications:

1. Notification (Art 6) to WHO Regional IHR Contact Point on events which may constitute a public health emergency of international concern within a State Party's territory;
2. Information sharing during unexpected or unusual events (Art 7)
3. Report evident of public health risks of potential international spread identified outside their territory (Art 9)
4. Consultation with WHO (Art 8) to seek advice on appropriate health measures
5. Verification (Art 10) of events;

In addition to four notifiable diseases (see IHR (2005) Annex 2), NFPs shall use the four criteria included in Annex 2 of the IHR (2005) for other listed diseases and for any public health events with potential serious public health implications to decide whether to notify WHO of a particular public health event:

1. the seriousness of the event's public health impact;
2. the unusual or unexpected nature of the event;
3. the risk of international disease spread; and
4. the risk that travel or trade restrictions will be imposed by other countries.

If the event meets two or more of the above criteria it must be notified to WHO through the WHO Regional IHR Contact Point.

4. Exercise JADE

Exercise JADE is a regional functional simulation exercise planned, developed and facilitated by the WHO Health Emergencies (WHE) Programme at the WHO Regional Office for Europe (EURO). The scenario involved an emerging listeriosis outbreak and its health consequences.

All exercise communication was conducted through email and injects were delivered through email or through a private YouTube video link, as per injects.

4.1 Objectives

The purpose of any simulation exercise is to help participants learn by identifying strengths and shortcomings in a safe environment and thus help to prepare for a real emergency situation. The intention of Exercise JADE is not to evaluate the performance of any individual or State Party but rather to engage in a collective activity, to share experience and to learn.

The specific objectives for Exercise JADE were as follows:

1. To test 2-way communications between the NFPs and WHO IHR Regional Contact Point using registered contact details;
2. To test NFP's access and use of the Event Information Site (EIS);
3. To practice and test NFP's assessment of public health events using the decision instrument contained in Annex 2 of the IHR (2005) and its notification process, including an EIS posting;
4. To assess multi- sectoral coordination between the NFP and other sectors, as applicable, in conducting basic risk assessment; and
5. To assess coordination between NFPs and the communications counterparts in developing statements and communication material for the public.

4.2 Exercise Dates

In order to facilitate participation of large number of countries, two 5-hour exercises were conducted on separate days: one for English speaking participants (13 November 2018) and one for Russian speaking participants (15 November 2018). The content of the two simulation exercises was identical.

4.3 Participation

Twenty nine (29) States Parties were initially invited to participate in the exercise of which 27 NFPs ultimately agreed to participate in full during one of the two exercise days. As this was the first iteration of exercise JADE, in order to limit the number of participants to manageable number, only countries with WHO Country Offices were selected to participate.

Non-participation was mainly due to NFPs having overlapping commitments on the day of the exercise (one NFP). Only one country did not respond to injects despite accepting to participate.

Participating Country 13 November (English-speaking)	Participating Country 15 November (Russian-speaking)
1. Albania	1. Azerbaijan
2. Bosnia and Herzegovina	2. Kyrgyzstan
3. Croatia	3. Moldova
4. Czech Republic	4. Uzbekistan
5. Estonia	5. Armenia
6. Georgia	6. Belarus
7. Greece	7. Kazakhstan
8. Hungary	8. Russian Federation
9. Latvia	9. Tajikistan
10. Lithuania	10. Turkmenistan
11. Montenegro	
12. Poland	
13. Romania	
14. Serbia	
15. Slovenia	
16. Republic of North Macedonia	
17. Turkey	

National IHR Focal Points participated from their respective workspaces or wherever they would convene to undertake the function of event management during an event. No participant travel was necessary or expected.

While, the exercise focused on the functions of the NFP, participants were encouraged to involve other stakeholders, such as the food safety authority, to test collaboration and input into various objectives of the exercises.

4.4 Preparations

Prior to Exercise JADE, all participants received an invitation via email along with basic information on the purpose, scope and date of the simulation exercise. Once the list of participants was agreed upon, a Russian or English Participant Guide, along with time zone-specific schedules, was sent to all participating countries. One week before the exercise, the Participant Guide was sent out again along with the first inject (Inject 0), revealing the earliest stage of the scenario (unconfirmed rumours on social media and news media of an unidentified outbreak). Participants were asked to confirm the receipt of all injects to check communications between Exercise Control and the NFPs (See Annex 3 for the individual injects). Follow up with participants who did not acknowledge receipt of Inject 0 was conducted by phone and exercise feedback was collected through online survey.

Several days before the exercise, a communication test was held to test audio and visual connections. This communication test was also used to verify that the NFP had received inject 0. After each exercise day, a WebEx briefing immediately following the end of the exercise (a “hot wash”) was held, during which participating countries were asked what went well and what challenges they faced during in completing the exercise.

4.5 Exercise management team

The exercise management team was responsible for the overall organization, execution and evaluation of exercise JADE. The development of all documentation, including injects handbooks and actions sheets, was done by the exercise management team consisting of four units of the WHO Health Emergencies Programme in the WHO Regional Office for Europe and the WHO Health Emergencies Programme in WHO Headquarters.

The exercise management team consisted of:

1. The Exercise Controller and Assistant Controller (Exercise Control)
2. Support to Exercise Control (admin, technical)
3. Duty Officers (DOs) from the WHO Regional IHR Contact Point
4. Support to DOs (admin, technical)
5. Observers/note-takers





Exercise JADE team in Azerbaijan



Exercise JADE team in Georgia

5. Observations and Recommendations

Exercise JADE by the numbers:

Number of countries participating: 27
Number of emails sent during the exercise: 648
Number of emails per hour of exercise: 81
Number of Exercise management team members: 11
Number of injects: 13

Objective 1:

To test 2-way communications between the National IHR Focal Points and WHO IHR Regional Contact Point using registered contact details;

Fundamental to the real-time management of information and for efficient communication during a public health emergency is the ability to contact and sustain communication channels between IHR NFPs and WHO and to have timely responses to requests for information and verification. To this end, substantial efforts are made to ensure that contact details for the NFPs are updated regularly. Additionally, while under the IHR(2005) the exact structure and organization of the NFP is left to the State Party it is suggested that the NFP be offices, rather than individuals, in order to facilitate the NFP accessibility at all times and not to rely on the availability of a particular individual.

During the exercise all exercise communication was sent exclusively to officially nominated NFPs by using the official mail address registered in EIS, as well as to additional emails formally designated by national authorities. Additionally, for countries which confirmed participation but for which no acknowledgement was received for inject 0, email messages were followed up with phone calls using the official telephone numbers from the EIS. The result of this attempt to contact NFPs showed that many of the email addresses and or telephone numbers were no longer valid. Furthermore, many of telephone numbers provided did not work or were switchboards for organizations hosting the NFP, which is not conducive to rapid communication during an emergency.

Nevertheless, once communication was established, all NFPs sustained communication throughout the course of the exercise, during which over 648 emails messages were exchanged.

It was also noted during the exercise that many of the NFP email addresses were personal emails, rather than generic or institutional emails, which is more likely to lead to outdated contact details when these individuals change function.

Recommendations

Short-term:

- IHR NFPs, where possible, should consider the use of a generic IHR NFP email account, accompanied by SOPs for accessing and communication under IHR (2005),
- IHR NFPs should periodically update contact details, including telephone numbers;

Medium-to-long-term:

- WHO ROs should perform regular communication checks with NFPs through the organization of simulation exercises, such as Exercise JADE, in order to ensure up-to-date NFP contact details

Objective 2:

To test NFP's access and use of the EIS;

The EIS is the primary communication channel through which WHO disseminates event related information, risk assessments and public health advice to all NFPs for on-going public health events, as per IHR (2005) Article 11. It is an online secure portal accessible only to NFPs and a few selected international partners. The ability to access updated event related information on EIS is essential to conduct national risk assessments and to design relevant public health measures. One of the key functions of the NFP is to share the information received through EIS with all relevant authorities in their countries, while respecting the confidentiality of the information provided.

For this reason, one of the tasks requested of the NFP was to access EIS in order to verify contact details and to conduct a search for past listeria outbreaks reported to WHO. Before the exercise several NFPs informed WHO that they were unable to log in to EIS and requested assistance in gaining access. Several participants also faced EIS access problems during the exercise.

The main challenges encountered in accessing the EIS included:

- Change in staffing within NFP;
- Lost or forgotten login details;
- Participant not listed as NFP and, thus, not having access to EIS.

It was clear, however, that once NFPs could access EIS, navigating the site including the search functions, was done effectively and correctly.

Access and familiarity with EIS is a critical aspect of the IHR event communications system, and it was encouraging to see that the exercise resulted in important improvements of the reliability and efficiency of IHR communications in the region.

Recommendations

Short-term:

- NFPs should maintain SOPs for accessing EIS to avoid loss of access during staff changes and should regularly log in to check for updates and to update NFP contact details.

Medium-term:

- WHO should have a test-site where exercise related events can be posted and used for training and evaluation purposes.

Medium-to-long-term:

- WHO may consider conducting periodic studies on the use and relevance of information shared through EIS and how this translates into national risk assessment and action.
- In future exercises, the extent of sharing the information received from EIS by NFPs with relevant authorities and sectors in their countries should be assessed.

Objective 3:

To practice and test NFP's assessment of public health events using the decision-making instrument contained in Annex 2 of the IHR (2005) and its notification process including an IHR EIS posting;

Convening national stakeholders to undertake an assessment to decide whether to notify WHO of a detected event which may constitute a public health emergency of international concern (PHEIC) within a State Party's territory in accordance with the IHR(2005) Annex 2 decision instrument is perhaps the most important function of the NFP. It is critical for timely response measures to be implemented in order to limit the potential international spread. All NFP must be familiar with Annex 2, its application and requirements and the process of notification. In order to practise the use of the Annex 2, Inject 4A requested NFPs to apply the four criteria and to determine the need for formal notification to WHO.

Of the 21 countries that provided a response to this inject, 20 concluded that there was a need to notify WHO in accordance IHR (2005) Annex 2. Only one country decided that the event did not require notification as – in their view – the it did not fulfil at least two of the four criteria. See table 2 on the breakdown of the IHR (2005) Annex 2 assessment answers provided by NFPs.

Of the same 21 countries, 43% provided an explanation for the decision to notify the event to WHO. 50% of countries provided a list of stakeholders that would have been involved in the assessment if the event had been real. The majority identified the national food safety authorities, the European Union Rapid Alert System for Food and Feed (RASFF) and the WHO International Network of Food Safety Authorities (INFOSAN) contact points and other sectors, such as the Ministry of Agriculture and Veterinary Services.

WHO opinion: IHR (2005) Annex 2 assessment of Exercise JADE Listeria outbreak

Serious Public Health Impact - Yes

Listeria monocytogenes is the causative organism responsible for foodborne human infection listeriosis and the case fatality rate may reach around 20% in those with invasive disease. Listeriosis can lead to severe consequences, particularly in susceptible populations such as pregnant women, newborns, elderly and immunocompromised patients. Infection during pregnancy can result in abortion or premature delivery, and/or infection in newborns. The case fatality rate in newborns is 20-30% and can be as high as 50% when onset occurs during the first four days after delivery. In the current outbreak, at least 100 cases were confirmed from 20 different health districts in Country X, of which 18 (18%) have died.

Unusual or unexpected - Yes

There have been only sporadic cases of listeriosis reported annually over the past 10 years in Country X. The number of reported listeriosis cases exceeded the normal threshold and this is by far the largest outbreak of listeriosis recorded in Country X.

International disease spread - Yes

The source of the outbreak has been identified as contaminated tomatoes in a local farm in Country X. The farm in question is a diverse agriculture business that sells tomatoes and other material to nearby provinces, and some of this material is also available for export. The risk of international spread is linked to contaminated tomatoes and products exported to other countries and will persist until these products are effectively removed from the market.

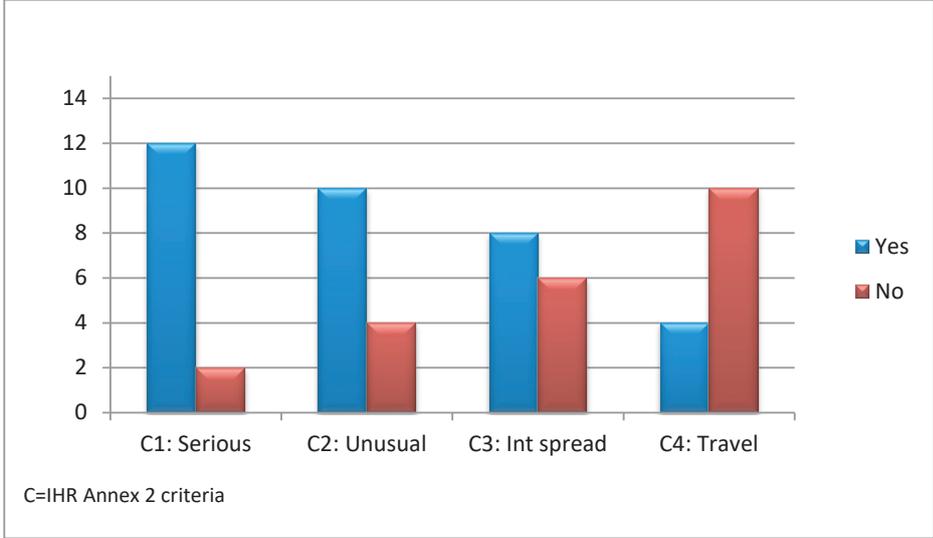
Interference with international travel or trade - Yes

There is a significant risk of interference with international trade. Exported materials from the outbreak source that are potentially contaminated should be recalled in order to mitigate the risk of international spread of the disease.

»» "The exercise proved the value of inter-sectoral cooperation in events that threaten the public health."



Table 2: IHR (2005) Annex 2 results of the decision making instrument



In addition to notification, other forms of communication with WHO exist, such as Consultation (Article 8), which can be used to seek WHO advice on the need for notification or on public health measures, or Other reports (Article 9). While, these were not explicitly requested during JADE, NFPs should be aware of additional communication mechanism under the IHR (2005). WHO is always ready provide assistance, as necessary, and, if appropriate, proactively, in determining the need to notify the IHR Regional Contact of Point of an on-going event.

The final task for the NFP in preparation of an EIS posting was the checking of the factual accuracy of a draft EIS posting prepared by the WHO Regional Contact Point, which intentionally included a number of inaccuracies and errors. The majority of NFPs identified and corrected the errors and made additional suggestions to improve the content of the EIS posting. The collaborative engagement between NFPs and the WHO Regional Office Contact point is an important aspect to operational communication under IHR (2005) and contributes to transparency and accountability. Ideally, EIS postings, including risk assessment, shall be performed jointly by the member states and WHO.

Recommendations

Medium-to-long-term:

- NFPs should conduct regular refresher training, particularly with the arrival of new staff, on risk assessment, the use of IHR (2005) Annex 2 and on access and use of EIS postings and on contributing to the draft EIS postings shared by WHO.
- WHO EURO should establish a European NFP Knowledge Network for exchange of information and best practices.

Objective 4:

To assess multi-sectoral coordination between the NFP and other sectors, as applicable, in conducting basic risk assessment.

The mandate, process and contacts to work across sectors in the management of information, in assessing risks, and in coordination of response activities is a critical aspect of the role of the NFP, irrespective of the hazard presented, be it infectious, chemical, radiological, foodborne or other (all-hazard approach). The starting point for this coordination is to have the contact details of relevant institutions and agencies. The International Food Safety Authorities Network (INFOSAN) is a global network of national food safety authorities, managed jointly by the Food and Agriculture Organization of the United Nations (FAO) and WHO. It supports the Member States in managing food safety risks, ensuring rapid sharing of information during food safety emergencies to stop the spread of contaminated food from one country to another.

While membership in the INFOSAN network is voluntary, all member states are encouraged to identify an INFOSAN emergency contact point (ECP) with whom information on contaminated food is exchanged. Given the high prevalence of foodborne risks and the growing trade of food products, effective communication between the NFP and the INFOSAN emergency contact point is important.

Inject 5a of JADE requested NFPs to identify the INFOSAN contact point and to provide their contact details. Of the 26 NFPs who responded to this inject, 65% identified the relevant institution or individual and provided the contact details. The main reasons for not identifying the INFOSAN emergency contact point (ECP) were:

- Food safety authority had recently been created and INFOSAN ECP had not yet been designated
- The country did not participate in the INFOSAN network.

Several NFPs identified an entire Ministry as the INFOSAN ECP. While this may be correct, in an emergency valuable time can be saved by having the specific contact details of the INFOSAN ECP available also to the NFP.

The purpose and scope of the IHR (2005) states that measures taken to respond to any public health event should be commensurate with, and restricted to public health risks, and avoid unnecessary interference with international traffic and trade. In other words, countries should not implement measures restricting travel and trade in the name of public health, without an evidence-based rationale. Indeed, during a public health event, WHO monitors restrictions in travel and trade and may request, according to IHR (2005) Article 43. If a country implements measures that can be considered non-commensurate with the public health risk, they are required to provide public health rationale and relevant scientific information to WHO on the need for such a measure.

For several participants who completed the previous tasks, a final inject requested the NFP to provide three briefing points for the Ministry of Trade based on the application of IHR (2005) Article 43 on additional health measures. For those NFPs that provided a response, most of the information provided related to public health measures implemented to reduce the probability of international spread. Additionally, it is important to bear in mind and to communicate with stakeholders that might be unfamiliar with the principles of the IHR (2005) that it is the responsibility of the State Party to provide a public health justification for any measure implemented which restricts travel or trade.

Recommendations

Short-to-medium term:

- All NFPs should identify an INFOSAN ECP and maintain a distribution list of relevant stakeholders from other sectors. A process should be established for regular updating of contact details to ensure that contacts are always updated.
- WHO should include information on IHR(2005) Article 43 and the application of trade and travel restrictions in future trainings and briefing papers.

Objective 5:

To assess coordination between the IHR NFP and the communications counterparts in developing statements and communication material for the public.

Emergency risk communication (ERC) is one of the eight core functions that WHO Member States must fulfil as signatories to the IHR. It is an essential part of emergency management and the success or failure of a response often hinges on effective communication. It entails the real-time exchange of information, advice and opinions between experts, community leaders, or officials and the people who are at risk. Timely and effective communication allows authorities and experts to listen to and address people's concerns and needs so that the advice they provide is relevant, trusted and actionable.

While communication is not the role of IHR NFPs, many participants were able to demonstrate their input into developing statements and communication materials. Participants demonstrated use of formal and informal procedures for internal communication and coordination. It was clear that some participants were familiar with and outlined clear next steps in line with existing emergency response plans and standard operating procedures (SOPs) while others appeared not to be guided by these plans and procedures.

NFPs must take an active role to ensure sufficient coordination within and between sectors and actively engage in a variety of communication efforts. These efforts aim to improve the timely release of coordinated and approved communications through trusted channels that informs at-risk populations, encourages adoption of preventive behaviours and limits adverse impacts. Despite completing the task, over half of participants provided what appeared to be non-coordinated and non-approved messages. In addition, many participants did not have or provide contact details of the press/media office or spokesperson(s).

Communication material for the public is not limited to press conferences and statements. In the exercise, few participants included specific public health advice, neither preventive interventions nor mentioned the importance of understanding risk perception and addressing rumours and misinformation through use and activation of community engagement mechanisms. This would not be a function of the press/media office and must be included in coordination and the communications component of SOPs and emergency response plans.

Recommendations

- For Member States that have an ERC plan, NFPs should ensure they review this plan and are aware of procedure communicating with public stakeholders. For Member States that do not currently have an ERC plan, NFPs should encourage and contribute to the development of the multisectoral, all-hazards ERC plan and SOPs that supports transparency and early announcement and enhances coordination, approval and the timely release of information;
- NFPs should actively seek to participate in ERC trainings, workshops, and simulation exercises to enhance their knowledge of ERC principles and practice and contribute to regularly updating the ERC plan and SOPs.
- NFPs should ensure that a system is in place for information sharing and coordination with specialists responsible for community engagement mechanisms and activities.



Exercise JADE Management team in WHO/Europe

6. NFP Feedback and Evaluation

6.1 General observations from participants

Pace of the exercise: Several participants noted that the pace of the exercise was too fast, that the scenario was very complex and therefore there was insufficient time to consult relevant institutions and to formulate comprehensive responses. All countries participated until the end of the exercise with some responses received after the formal closure of the exercise.

Recommendations: The Exercise Management Team may consider either

- A simpler scenario in the future
- Lengthening the actual exercise time to give more time to complete individual injects (more time- and resource-intensive).

Hot wash Platform: Despite having a communication test a few days before the exercise, some participants still encountered difficulties accessing WebEx in order to join the hot wash after the end of the exercise.

Recommendations: The Exercise Management Team should consider another video enabled debriefing platform that works better for all NFPs. Other information technology solutions are available should be explored.

Note: it was found during the exercise that for the moment, video enabled communication systems are not a solution for communication during an emergency.

»» "Have similar exercises once or twice per year!"

Intersectoral collaboration: Several NFPs suggested the exercise could have been a good opportunity to practice intersectoral involvement and this could have been facilitated in the exercise development. Since exercise outline (Inject 0) was shared shortly before the exercise, there was not enough time to adequately involve these sectors.

Recommendation: The exercise management team should share exercise outline earlier so that exercise participants have time to coordinate with and prepare for the involvement of relevant sectors.

Action and Problem Logsheets: Several NFP expressed confusion on the use of action and problem logsheets during the exercise. Indeed, both were used differently during the course of the exercise.

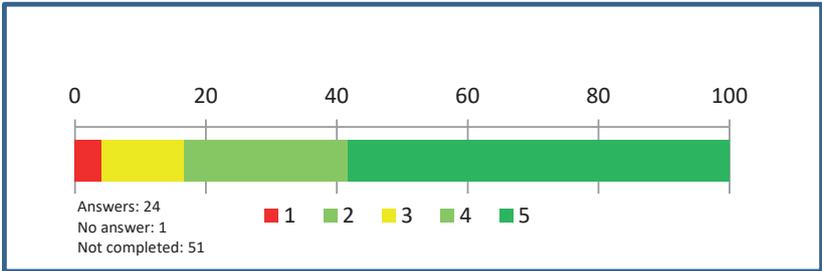
Recommendation: The exercise management team should communicate more clearly on the use of the action and problem logsheets in the participant guide.

6.2 Results of the evaluation survey

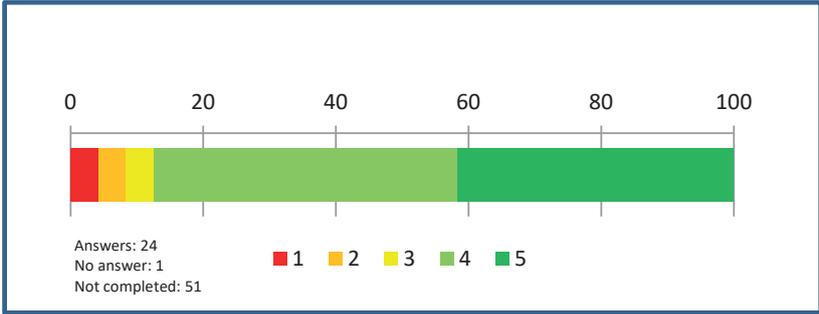
In addition to the “hot wash” (briefing immediately following the end of the exercise), participants were requested to complete an online evaluation survey on the quality of the exercise, learning points and areas of the exercise which could be improved.

Evaluation scores are scored 1 (lowest) to 5 (highest). Free text comments have been consolidated and edited for clarity.

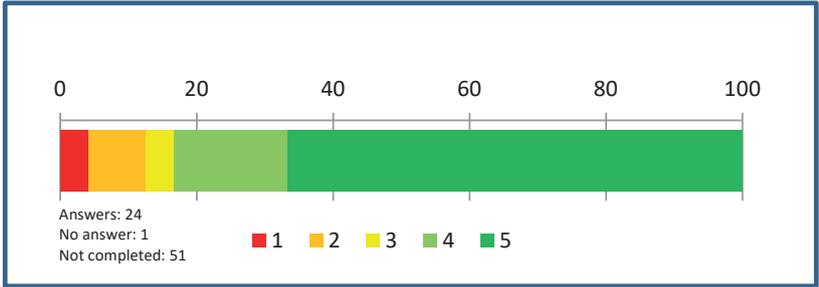
Question 1: Did the exercise meet your expectations?



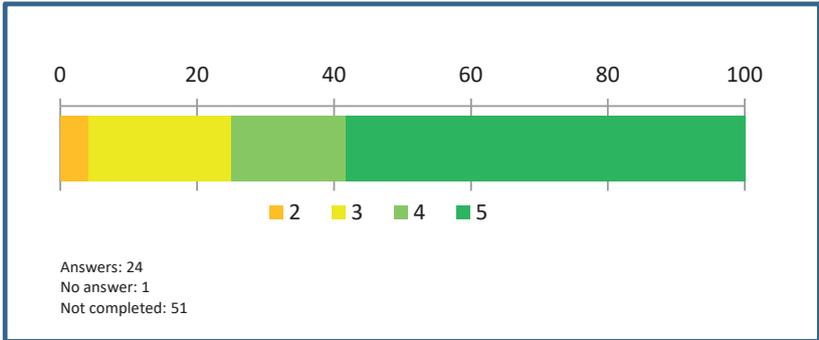
Question 2: Was the exercise well-structured and organised?



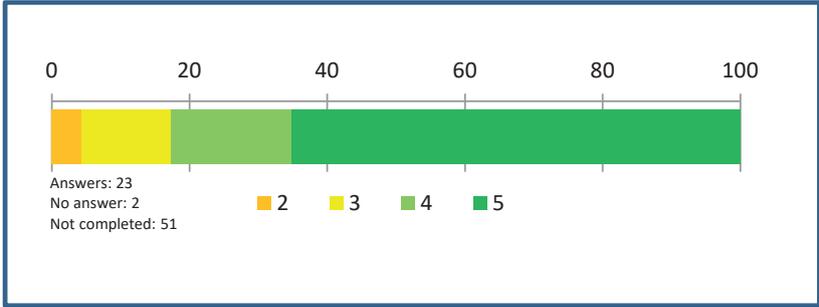
Question 3: Was the scenario realistic?



Question 4: Did you find the exercise helpful and/or useful in facilitating the event-related communications?



Question 5: The exercise allowed me to test my role as a National Focal Point?



Question 6: What are two useful things that you have learned/observed from the exercise?

Most common feedback from participants was:

- Participants highlighted the value of the exercise as an opportunity to test and improve coordination, cooperation and communication with other sectors
- The exercises allowed *the identification of gaps and weaknesses in communication and co-ordination protocols*, and highlighted where additional SOPs are required for the operations of the NFP
- The exercise showcased the *importance of rapid communication with the media including on social media* during a public health emergency.

Question 7: What are two priorities that you would suggest for the improvement of your operations in the future based on the results of the exercise?

Most common feedback from participants was:

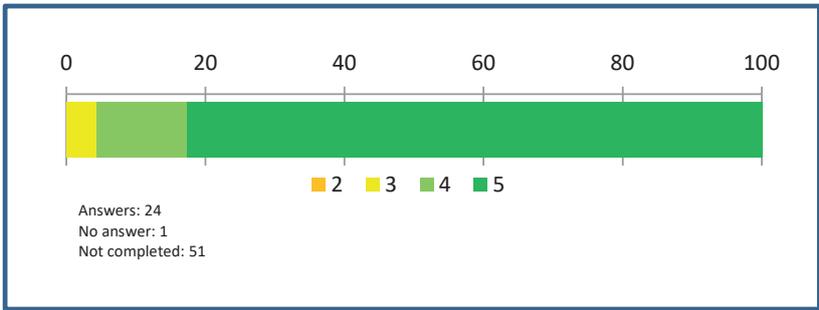
- Continuous reviews and updates of the ERC plan and of contact information of crucial public health authorities.
- Strengthened intersectoral collaboration with the competent authorities responsible for IHR implementation including that with the INFOSAN Contact Point.
- Enhancing the awareness of IHR among the non-health sector.

Question 8: What suggestions do you have that well help us improve our exercise in the future?

Most common recommendations from participants to improve the exercise were:

- Conduct simulation exercises of IHR NFP functionalities annually
- Review the timing of injects in order to allow for more time between them and to have more time for the exercise overall.
- Review the usernames of emails used to send out injects in order to avoid confusion.
- Do not include public communication and non-NFP functions as part of the exercise.

Question 9: After the exercise I feel better prepared to respond as a National Focal Point?



Question 10: Other comments

State Parties highlighted that the exercise was a good opportunity to *test the country's capacities and communication protocols* and reiterated support towards *making it a yearly exercise*.

7. Conclusions

Exercise JADE achieved the objectives set out and based on the feedback from participants and the Exercise management team. It was evaluated as a valuable learning and training experience. It clearly demonstrated that the procedures for communication under IHR are well established throughout the WHO European Region, however, the relative infrequency of events that may constitute a public health emergency of international concern which requires notification means that these processes are not put to use very often. Opportunities like exercise JADE to practise communication and collaboration are valuable to have fluid information exchange during a real situation. Likewise, the exercise showed that the principles of emergency risk communication are well understood and appreciated for their importance during a response, despite this not being a mandatory function of the NFP.

Based on the feedback and recommendations on how to improve the exercise, the WHO Regional Office for Europe plans to organize exercise JADE on a yearly basis and to involve all States Parties in the Region. Future exercises will change to practice other functions of the NFP and involve others stakeholders with whom the NFP may be brought to collaborate with during a real event.



Exercise JADE team in Lithuania



“These exercises are a good opportunity to test the country’s capacities and communication protocols.”



Annex 1: Exercise JADE

Scenario outline

Full injects are available on the following Dropbox link:

<https://www.dropbox.com/sh/4cm0ujscexsbzii/AAB7CkLgPXVYngmJjdd6Ch2Ga?dl=0>

Day 1 (1 June 2018)

- **Reports spread on social media** (inject 1) of an unidentified GI infection affecting the residents of a nursing home called Sunflower Nursing Home. Using the hashtags #SunflowerDisease or #SunflowerNursing, people on social media report symptoms such as confusion, hallucinations, nausea, vomiting and diarrhea, as well as flu-like symptoms. Three people have died according to social media reports, none of the deaths have been confirmed. A news article in *Truth News* is published summarizing the events.

Day 3 (3 June 2018)

- **Newspaper article** (inject 2) regarding the social media reports is published by *News First*. The article also includes the information that many of the affected residents attended a big international festival, the Mozart Boogie Woogie Festival. No official statements have been made from the health authorities so far.

Day 7 (7 June 2018)

- **First press release from MoH is published** (inject 3) confirming *Listeria Monocytogenes*. The report mentions 88 confirmed cases and 16 deaths.
- Epidemiological and laboratory investigations are being conducted to determine the source of the outbreak
- **An email request from the Ministry of Tourism and Economy** concerning potential risks to tourism and trade is sent to MoH. The epidemiological service of MoH in turn asks the NFPs to check EIS for current listeria outbreaks (inject 3).

Day 26 (26 June 2018)

- Details to the investigation by the National Food Safety Authorities are sent to the MoH. The investigators found *Listeria Monocytogenes* in tomatoes at the New Horizon farm in Province South, and the strain is identical to the type of listeria that caused the current confirmed cases. 100 confirmed cases, 18 deaths and the link to New Horizon farm.

- **The MoH issues an updated report on the outbreak** (inject 4a) confirming the source of the outbreak as tomatoes from New Horizon Farm. In your own country, this producer exclusively supplies the two super market chains Food Coop and Deli Deli. A recall of the tomatoes sold in the supermarket chains Food Coop and Deli Deli is announced by the National Food Safety Authorities, and consumers are encouraged to dispose of tomatoes bought from these stores. Confirmed cases have now reached 100 with 18 deaths. Possible international spread through exported goods is mentioned in the HIM report (inject 4c).

Day 27 (27 June 2018)

- Further details on the investigation at New Horizon Farm, including the possible export of contaminated tomatoes and/or spread to other farms through contaminated water system
- The tomatoes from New Horizon farm may have been sold outside the country – this is currently being investigated. Because of the possible international spread, **the INFOSAN Secretariat in Geneva contacts the NFP** (inject 5a). The INFOSAN Secretariat has been informed of the outbreak through the National Food Safety Focal Point.
- Further investigations into the root cause of the contamination were conducted by the National Food Safety Authority. The outbreak strain of *Listeria Monocytogenes* was identified on a dirty cart on New Horizon farm which had been purchased 11 weeks ago from a cattle farmer who had previously used it to transport cattle manure. Investigators concluded that the “*cart’s past use likely played a role in the contamination*”. Tomatoes transported in this cart could have become contaminated, subsequently spreading the bacteria into the packing facility on New Horizon Farm where it propagated. Water sampled from the tomato conveyor belt in the packing facility on New Horizon farm also tested positive for the outbreak strain of *Listeria monocytogenes*. Other areas of the packing facility, including the drain pipe, tested positive for the outbreak strain of *Listeria Monocytogenes*. Production on New Horizon farm was shut down for thorough sanitization of all equipment and production environments, including inside the packing facility.
- A neighboring country, Global Land, has threatened to ban all exported vegetable products in response to the ongoing outbreak of *Listeria Monocytogenes* (Inject 5b), despite WHO not recommending any travel or trade restrictions at this time. The Ministry of Trade requests key points for an appropriate response based on the application of the IHR in matters of travel and trade restriction.

Aftermath

- Because of the long incubation period for Listeriosis, cases continued to be identified for 3 weeks following the date when the recall of New Horizon Tomatoes was announced. A final update issued by the MoH was published 3 months after the date when the outbreak was first identified. The number of cases totalled 146, including 30 deaths across 28 health districts. One miscarriage was confirmed.

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

Member States

Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands
Norway
Poland
Portugal
Republic of Moldova
Republic of North Macedonia
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Turkey
Turkmenistan
Ukraine
United Kingdom
Uzbekistan

World Health Organization Regional Office for Europe

UN City, Marmorvej 51, DK-2100 Copenhagen Ø, Denmark

Tel.: +45 45 33 70 00 Fax: +45 45 33 70 01

E-mail: euwhocontact@who.int

Website: www.euro.who.int