In November 2019, the WHO Health Emergencies (WHE) Programme for 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.
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Keywords

JADE EXERCISE, IHR
EMERGENCY PREPAREDNESS
SIMULATION EXERCISE
MONITORING
EVALUATION FRAMEWORK

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“The exercise was an excellent opportunity to practice NFP functions.”
1. Summary

The National IHR Focal Point (NFP) is a mandatory function for each State Party signed up to the International Health Regulations (IHR 2005), under IHR (2005) Article 4, to ensure that public health risks are effectively notified to the World Health Organization (WHO), verified when requested, and consequently responded to under the IHR (2005). In the European Region, the NFP function is well established, yet many NFPs rarely have the opportunity to practice communication requirements for potential Public Health Emergencies of International Concern (PHEIC) under the IHR (2005) given the infrequency of PHEICs in the European Region.

In November 2019, the WHO Regional Office for Europe organized the second annual Joint Assessment and Detection of Events (JADE) simulation exercise for NFPs in the WHO European Region. Exercise JADE has been modelled on IHR Exercise Crystal, which has been conducted every year in the WHO Regional Office for the Western Pacific (WPRO) since 2008.

Exercise JADE is a functional exercise, designed to practice collaboration between the NFPs and the WHO Regional IHR Contact Point. WHO is committed to supporting State Parties in exercising their mandatory NFP functions and this exercise creates a safe environment for NFPs to practise and refine their national and/or subnational systems.

All 55 States Parties to the IHR (2005) were invited and forty-six (46) participated in this simulation exercise during one of the 3 days. States Parties were allocated into groups and assigned to participate in the 5 hour exercise on one of the 3 allocated days. Participants from nine Russian-speaking NFPs took part on the 21 November 2019, and participants from 37 English-speaking NFPs took part on 19 and 22 November 2019.

This year’s Exercise JADE included a potential health event at a designated point of entry (an airport), along with tasks requiring multisector coordination and risk communication. The exercise was designed to test the systems in place for implementation of the IHR (2005), including access and use of the Event Information System for National IHR Focal Points (EIS). During the 3 days of exercises, 1,511 emails were exchanged between NFPs, WHO IHR Regional Contact Point and Exercise Control.

For 2019, Exercise JADE simulated the emergence and spread of a novel arenavirus, in each of the participants’ countries. The outbreak progressed as the virus evolved over a 6-week period, initially reported in domestic animals, spreading to humans, and later spreading from human to human. As the fictitious scenario developed, participating NFPs were tasked to practise elements of assessment, consultation and/or notification, decision-making and information exchange, as per IHR (2005).

Overall, participants demonstrated strong application of the requirements and procedures necessary to fulfil their roles as NFPs, particularly with respect to consultation and/or notification, verification and information exchange with the WHO Regional IHR Contact Point. Likewise, within the area of points of entry, most NFPs demonstrated their knowledge in identifying designated airports in their country. Finally, most NFPs also demonstrated the existing strong relations with veterinary authorities and risk communication counterparts, and displayed experience of working across sectors.

The main recommendations can be found in the sections below, which are organized by objective.
2. Acknowledgements

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

WHE Programme for the WHO Regional Office for Europe would like to thank the WHE Programme for the WHO Regional Office for the Western Pacific for giving us the opportunity to learn from their extensive experience in organizing IHR Exercise Crystal, which proved to be invaluable. We would also like to thank the Country Health Emergency Preparedness and IHR Department at WHO headquarters for providing continuous support in the design, development and execution of Exercise JADE and to Health Emergency Information and Risk Assessment Department, WHO headquarters, for seconding a staff member for a week to help conducting the exercise. We would also like to thank the WHO Regional Office for Europe staff who helped design, develop, refine and implement Exercise JADE.

The WHE Programme for the WHO Regional Office for Europe also thanks the National Institute for Public Health and the Environment (RIVM) of the Netherlands for their support in the evaluation of Exercise JADE and the European Centre for Disease Prevention and Control (ECDC) for sending an observer for the day on which the participating countries were EU/EEA Member States.

Finally, the WHE Programme for the WHO Regional Office for Europe is grateful to Germany for providing financial support for the organization of Exercise JADE.

“Simulation means we get the chance to practice. It reminded us of the importance of regular and scheduled simulation as part of core business, rather than it being a luxury or an add on.”
3. Introduction

The International Health Regulations (2005) (IHR) are an international agreement, legally binding for 196 countries worldwide, to work collaboratively with each other and with WHO to prevent, protect against, control and respond to the international spread of disease. The IHR were adopted by the World Health Assembly in May 2005 and 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) function 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 WHO concerning public health events that are relevant under IHR.

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

1. Notification (Article 6) to the 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 (Article 7).
3. Consultation with WHO on events not yet meeting notification criteria or seeking advice on appropriate health measures (Article 8).
4. Other reports of public health risks of potential international spread identified outside the State Party’s territory (Article 9)
5. Verification of events (Article 10)
6. Collaboration and assistance (Article 44) between different NFPs.

In addition to four notifiable diseases (see IHR (2005) Annex 2), NFPs will use the four criteria included in the decision-making tool (IHR (2005) Annex 2) 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.
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 (Joint Assessment and Detection of Events) is a regional functional simulation exercise that is planned, developed and facilitated by the WHE Programme for the WHO Regional Office for Europe. The scenario involved an emerging zoonotic disease outbreak (see Annex 1) to be responded to by the NFP in each participating State Party.

All exercise communication was conducted through email injects with attached documents and links to access media files included in the exercise.

4.1 Objectives

The purpose of the JADE Exercise is to strengthen the functions of NFPs and to demonstrate the importance of IHR communication in contributing to risk assessment and situation monitoring, both regionally and globally.

The specific objectives for Exercise JADE 2019 were as follows:

1. To test two-way communication between the NFPs and WHO IHR Regional Contact Point using registered contact details.
2. To test NFPs’ access and use of the WHO Event Information Site (EIS).
3. To practice and test NFPs’ assessment of public health events using the decision instrument contained in IHR (2005) Annex 2 and its notification process, including an EIS posting.
4. To assess multisectoral coordination between the NFP and other sectors, as applicable, in conducting basic risk assessment.
5. To review arrangements for managing health events at designated points of entry (under IHR Articles 20.1 and 21.1).

The intention of Exercise JADE is not to evaluate the performance of any State Party or individual, but rather to facilitate a safe learning environment and to engage NFPs in the Region, to enhance preparedness and response mechanisms for real emergency event situations.

4.2 Exercise Dates

To facilitate participation for all States Parties within the WHO European Region, the same 5-hour simulation exercise was conducted on 3 separate days, for three groups of countries. Two days were allocated for English-speaking participants (19 and 22 November 2019) and one for Russian-speaking participants (21 November 2019).

The content of the exercise remained the same over the 3 days except during the first day of the exercise (19 November 2019), where Inject 12 was withheld due to time constraints.
4.3 Participation

All 55 States Parties in the Region were invited to participate in the exercise, of which 49 confirmed participation during 1 of the 3 exercise days. Non-participation was mainly due to NFPs having competing priorities on the day of the exercise.

During the exercise days, three NFPs withdrew before the start of the exercise due to illness, or a developing emergency at national level. Another three NFPs withdrew completely or partially during the exercise, due to emerging events at national levels. One NFP did not respond to injects despite accepting to participate.

<table>
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<th>Participating Country</th>
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<td><strong>English-speaking</strong> 19 November</td>
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NFPs participated from their respective workspaces or from whatever location in which they would convene to undertake the function of event management during an event. No participant travel was necessary.

While the exercise focused on the functions of the NFP, States Parties were encouraged to involve other stakeholders, such as the responsible national authority for animal health, to practice multisectoral collaboration and input into various objectives of the exercises.
4.4 Preparations

Planning for Exercise JADE 2019 started 6 months before the first exercise day, finalizing the scope, objectives and design elements. The invitation was sent via email to all States Parties, along with a brochure outlining the exercise purpose, scope, and dates for participation.

All exercise material, including the exercise debrief and evaluation survey, was prepared in advance by the Exercise Management Team. The exercise objectives guided the development of the injects and the adaptation of the scenario, inspired by the 2016 IHR Exercise Crystal developed by the WHE Programme for the WHO Regional Office for the Western Pacific.

Once the list of participants was finalized, the Participant Guide, along with time zone-specific schedules and requested pre-exercise system checks, were sent to all confirmed participating States Parties.

One week before the exercise, the exercise management team sent the first inject (Inject 0) via email to all participants. This was done to test the exercise communication plan and to build momentum towards the exercise start.

Prior to the start of the exercise all participants were invited to videoconference sessions, to test the connectivity needed for the debrief sessions, to ensure all participating NFPs had access to EIS, and to clarify any questions on how to participate in the exercise.

4.5 Exercise management team

The exercise management team was responsible for the overall organization, implementation and evaluation of Exercise JADE. The development of all exercise material, including briefings, all injects, participant handbooks, log sheets and schedules, was done by the Exercise Management Team. The team was drawn from the WHE Programme, within the WHO Regional Office for Europe, WHO headquarters and from partners.

The exercise management team consisted of:

1. Exercise Controller and Assistant Controller (Exercise Control);
2. Support to Exercise Control;
3. Duty Officers (DOs) from the WHO Regional IHR Contact Point;
4. Support to DOs;
5. Observers/Evaluators.

The exercise management team sat together to run Exercise JADE from the WHO Regional Office for Europe Emergency Operations Centre (EOC), in Copenhagen, Denmark. On each exercise day, participating NFPs were allocated to a dedicated facilitation team within the exercise management group. Each team consisting of a WHO Regional Office IHR Duty Officer, a support to the DO and an observer. These teams worked seamlessly together, under the direction of Exercise Control, to monitor and respond to participants during the exercise.
Exercise JADE 2019 in numbers:
Number of countries participating: 46
Number of exercise days: 3
Preparation time for Exercise Jade: approximately 6 months
Number of emails exchanged during the exercise: 1511 over the three days
Number of Exercise management team members: 21
Number of injects: 14
5. Observations and Recommendations

Objective 1:

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

The ability to contact and sustain communication channels between IHR NFPs and WHO is fundamental to the real-time management of information. For efficient communication during a public health emergency, timely responses to requests for information and verification are required. To this end, substantial efforts are made to ensure that contact details for the NFPs are updated regularly.

Prior to the exercise, all participants were encouraged to log in to EIS to check and update the official contact details if needed. During the exercise all exercise communication was sent exclusively to the officially nominated NFPs, using the official mail address registered in EIS, as well as to additional emails formally designated by national authorities.

Additionally, the pre-exercise communication (from the initial invitation to Inject 0) supported the exercise management team to verify the official NFP contact details for the States Parties within the Region. Those countries which did not reply via email were contacted via phone call, using the official telephone numbers from the NFP contact list in 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 or were unreachable on several attempts. 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. Six NFPs updated their contact details as a result of the exercise, once it had been confirmed that the contact details were outdated.

Nevertheless, once communication was established, all NFPs sustained communication throughout the course of the exercise, and during the 3 days of the exercise 1,511 emails were exchanged.

While under the IHR (2005) the exact structure and organization of the NFP is left to the State Party, it is suggested that the NFPs should be offices, rather than individuals. This is in order to facilitate NFP accessibility at all times and not to rely on the availability of a particular individual. In this regard, it was noted during the exercise that many of the NFP email addresses were personal emails, rather than generic or institutional emails. This is more likely to lead to contact details becoming outdated when these individuals change function. It was further noted that since JADE 2018, no State Party participating for a second year had transitioned from individual to generic and/or institutional official NFP contact details, in accordance with the JADE 2018 recommendations. One NFP did change to a generic email address after Exercise JADE 2019.
Recommendations

- IHR NFPs should consider the NFP function to be fulfilled by an institution, rather than by individuals, in order to facilitate NFP accessibility at all times and without relying on the availability of a particular individual.
- IHR NFPs should consider the use of a generic IHR NFP email account, accompanied by Standard Operating Procedures (SOPs) for accessing and communicating under IHR (2005).
- IHR NFPs should update contact details, including phone numbers whenever there are any changes.
- WHO should perform regular communication checks throughout the year with NFPs to ensure NFP contact details are up to date.
- WHO should develop a briefing on the role of the IHR NFP in operational communication to be sent out to all States Parties, to address both the issue of individuals holding the NFP function and to emphasize the importance of establishing generic/institutional contact details of the NFP.

Objective 2:

To test NFPs 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 ongoing public health events, as per IHR (2005) Article 11. It is an online secure portal accessible only to relevant WHO staff, NFPs and a few selected international partners. The ability to access updated event-related information on EIS is essential to conduct rational 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 exercise tasks this year requested NFPs to access the EIS and to conduct a search for the three most recent current events and three most recent zoonotic events for which there is communication on EIS.

Before the exercise, five NFPs informed WHO that they were unable to log in to EIS and requested assistance in gaining access. Three participants also faced EIS access problems during the exercise.

The main challenges encountered in accessing the EIS included:

- change in staff within NFPs;
- lost or forgotten login details;
- delegated JADE participant not listed as NFPs and/or 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. Only one country indicated finding information on EIS as the main challenge during the exercise (See Question 9 of the evaluation survey).

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 communication in the Region.

Recommendations

- 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 ensure that the NFP contact details are up to date.
- WHO may consider including information on the use of the European Commission Early Warning and Response System (EWRS) as a tool for IHR communications by EU/EEA countries in future exercises for States Parties in the European Union.
- In future exercises, the extent of sharing the information received from EIS by NFPs with relevant authorities and sectors in their countries could be assessed.

Objective 3:

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

All NFPs need to be familiar with IHR Annex 2, its application and requirements. Undertaking an assessment in accordance with the IHR (2005) Annex 2 decision instrument and to decide whether to notify WHO of a detected event is critical for timely response measures to be implemented in order to limit the potential international spread.

In order to practise the use of the IHR Annex 2, the exercise scenario and injects were designed to prompt NFPs to assess and determine if the event met the criteria for formal notification to WHO. Of the 46 countries, all countries concluded that there was a need to notify WHO in accordance IHR (2005) Annex 2. However, 29% of the official notifications received during the exercise did not initially include the participants’ risk assessments and notifications were often not sent to the Regional IHR Contact Point (euroihr@who.int).

An additional dimension to the notification process relates to the fact that 31 of the 55 NFPs in the WHO European Region are able to use the European Commission’s EWRS platform for official IHR notification to WHO, as EWRS includes a specific section for IHR notification to WHO.

To practice formal notification, it was decided that the facilitation team would guide participants to the correct WHO IHR Regional Contact Point’s email address and for the WHO Regional Office IHR Duty
Officer to prompt NFPs to share their risk assessment under IHR Annex II.


Your country | Acute Complex Feline Syndrome (ACFS)

**Serious Public Health Impact – Yes.** Acute Complex Feline Syndrome can cause severe human infections including multi-organ failure and death, although most cases will suffer mild symptoms such as fever and conjunctivitis. ACFS has demonstrated the ability to transmit from feline species to human and between humans. So far, human-to-human transmission has been observed among schools and in the community.

**Unusual or unexpected – Yes.** The source of infection of ACFS is confirmed to be a novel species of arenavirus. Feline species is highly suspected to be the main reservoir. However, the exact routes of transmission from feline-to-human and human-to-human are still unknown.

**International disease spread - Yes.** Although currently ACFS cases are confined in your country only, the exportation of infected feline and human cases from affected area in resulting further transmission of the disease is possible. The appearance of increased case count in multiple locations in your country suggests that this novel species of arenavirus could be widespread in immunity naive population.

**Interference with international travel or trade – No.** Based on the current information available, there is no public health justification for implementing any additional measures to prevent the spread of this disease by restricting travel or trade. However, there is a potential for interference with international travel and trade as similar events in the past (e.g. SARS) resulted in such measures to prevent disease spread.

*Extract from WHO-prepared EIS posting.

IHR Annex 2 assessment data reported to WHO by NFPs

All countries assessed the exercise event as: (1) a serious public health event, (2) which was unusual or unexpected, and (3) which had a significant risk of international spread. All NFPs assessed the event to meet the IHR Annex 2 criteria for notifying WHO through the IHR Contact Point, which was aligned with the exercise design, as noted in WHO’s assessment of the event above.

Informal consultation with WHO – IHR (2005) Article 8

In cases where the State Party is unable to complete a definitive assessment with the decision instrument in Annex 2, it has an option of initiating confidential consultations with WHO and seeking advice on evaluation, assessment and appropriate health measures to be taken. In case of doubt, States
Parties are encouraged to consult with WHO, based on IHR (2005) Article 8.

As part of the early stages of the simulation, NFPs were asked to identify an alternative to formal notification to WHO under IHR (2005) Article 6. The analysis indicates that the majority of NFPs were not immediately familiar with Article 8 (or Articles 7 or 9), with answers focusing more on the means of communication rather than the opportunity of initiating confidential consultations with WHO.

**EIS postings, provision of information by WHO – IHR (2005) Article 11**

This year, NFPs were asked to check the accuracy of a draft EIS posting prepared by the WHO Regional IHR Contact Point. The draft posting intentionally included inaccuracies and errors, designed to test the NFPs situational awareness and engage the NFPs in the process of fact checking the EIS posting. The majority of NFPs identified and corrected all or most of the errors, demonstrating the collaborative engagement with the WHO Regional Office IHR Duty Officer.

**Recommendations**

- NFPs should undertake regular training, particularly with the induction of new staff to ensure their confidence in the use the IHR (2005) Annex 2.
- WHO to support NFPs with a briefing note to clarify “informal consultations with WHO”, “WHO event verification process” and “formal notification to WHO under IHR (2005)”.
- WHO and ECDC to remind NFPs of the special arrangement for event reporting, to ensure compliance of State Parties with IHR within the context of regional reporting arrangements (EWRS). In particular, when EU/EEA Member States use EWRS for IHR notification, they should use the relevant section in the EWRS to include their assessment of the event in accordance with IHR (2005) Annex 2.
Objective 4:

To assess multisectoral coordination between the NFP and other sectors, as applicable, in conducting basic risk assessment

It is critical that effective information sharing and coordination between the human health and animal health sector is institutionalized, particularly in the management of zoonotic disease. Insufficient collaboration and mechanisms for exchange of information can cause confusion and a delayed response. Ideally, exchanges of information should happen early during the management of an event, including when conducting a joint risk assessment and planning. The first step of information sharing is having access to up to date contact details for counterparts in the other sectors to enable rapid consultation and exchange. The NFP, as the mandated entity under IHR (2005) for collection and dissemination of information from and to other sectors on public health events, must have these contacts and be empowered to work across sectors.

Inject 3 of Exercise JADE 2019 requested participants to provide contact details for the animal health counterpart with whom coordination of joint risk assessment could be conducted. All participating States Parties provided contact details for counterparts responsible for animal health with little hesitancy and demonstrated close multisectoral collaboration. Further, as the exercise management team had informed all participants in advance that collaboration with the animal health sector would be included in this year’s exercise, many NFPs were participating in collaboration with representatives from the animal health sector in their respective country, either via email correspondence or by physically participating in Exercise JADE together.

In addition, Inject 3 asked participating States Parties to describe notification requirements to the World Organisation for Animal Health (OIE). The Terrestrial Animal Health Code includes reporting obligations for OIE Member countries through the World Animal Health Information System (WAHIS). It is important that NFPs are also aware of reporting requirements under other international agreements to ensure that information is shared, if appropriate. In response, 88% of participants who responded reported that there is an obligatory reporting requirement to OIE, 7% reported that there was not or that this event was not notifiable, and 5% were not sure or reported other reporting requirements other than to OIE.

National Focal Point of Denmark during JADE exercise

Does the situation require a report to be sent to OIE?

Expert opinion: Dr François Caya, Head of the Regional Activities Department, World Organisation for Animal Health

Equivalent to the IHR (2005), Articles 113 and 114 of the Terrestrial Animal Health Code requires that Member countries provide reports to World Organisation for Animal Health (OIE) on the occurrence of listed animal diseases, infections and infestations in order to ensure transparency in and enhance knowledge of the worldwide animal health situation. This notification must be done through the World Animal Health Information System (WAHIS), which is an electronic platform accessible to OIE delegates which allows for early warning of OIE Member countries and situational awareness of the animal health situation globally. For the scenario presented in the Exercise JADE, even though the list of notifiable diseases does not include feline-borne diseases or Arenaviridae, reporting to OIE would still be mandatory under Article 1.1.4 which requires ‘notification through WAHIS or by fax or email, when an emerging disease has been detected in a country, a zone or a compartment’. Moreover, for the purpose of transparency and good practice, reporting events to OIE is encouraged in order to enable a coordinated, international response both in the veterinary sector, as well in the health sector.

An emerging disease means a new occurrence in an animal of a disease, infection or infestation, causing a significant impact on animal or public health resulting from:

- a change of a known pathogenic agent or its spread to a new geographical area or species; or
- a previously unrecognized pathogenic agent or disease diagnosed for the first time.

Inject 5 requested participants to provide contact details of the MoH Risk Communication Officer or Communication focal point with whom coordination of joint risk communication messages could be conducted. All participating States Parties, except six, provided contact details for counterparts responsible for risk communication or provided the information that a risk communication focal point is available. One State Party provided fictional risk communication contact details.

The core work of the NFP is sharing sensitive information. However, the NFPs will also sometimes work with colleagues who need to communicate some of this information to the public as appropriate, either directly or via the news media. This exchange of real-time information, advice and opinions between experts and people facing threats to their health, economic or social well-being, is called emergency risk communication.
ERC is one of the eight core capacities under IHR and is one of six outputs of the Pandemic Influenza Preparedness (PIP) framework.

In addition to a request for contact details, Inject 5 asked participating States Parties to share their advice on whether the following two pieces of information from Inject 4 should be released, released with caution, or withheld, followed by a short explanation:

- Early symptoms of the new disease include high persistent fever above 38°C, conjunctivitis, muscle pain and shortness of breath. As the disease progresses, patients also exhibit jaundice, nausea and vomiting, petechial/purpuric rash. If you or someone you know has these symptoms, please contact your nearest health care provider as soon as possible.
- The Public Health Institute is undertaking a laboratory investigation to determine the origin and deadliness of this disease; please check [website or other information channel] for the latest confirmed information.

**WHO opinion: Emergency risk communication – information release algorithm**

**The importance of transparency and early announcement of a risk**
Maintaining the public’s trust throughout an emergency is key for effective emergency risk communication, and requires ongoing transparency, including timely and complete information of a real or potential risk and its management. The first announcement frames the risk and addresses concerns. As new developments occur over the course of an outbreak they should be communicated proactively. Communication must include what is known and what is not yet known transparently. When transparency is high, people are more likely to trust the responders and follow recommendations.

**Deciding if and how to release new information**
The following algorithm serves to decide whether, and in what way, a piece of information should be released:

```
Is the info needed to protect health? [ ] YES [ ] NO

Is the info needed to build trust? [ ] YES [ ] NO

Is there a compelling reason to withhold info? [ ] YES [ ] NO
```

Reviewing the two pieces of information in Inject 4, the following should be concluded:

**First piece:** This information is necessary for people to protect their health (in this case, seek health care when they notice symptoms), and as such should be released immediately. Even in the absence of laboratory confirmation, public health advice ad interim is critical to mitigate the risk of disease transmission.

**Second piece:** The information demonstrates the Governments’ proactive response and provides access to the latest information. This will build trust and allow people to protect their health. However, the word “deadliness” may incite some undue panic. It should be changed to a more neutral wording, for example, “to determine origin and characteristics of this disease”.

[Exercise JADE 2019] 17
Regarding the first piece of information, 29 respondents reported that they would release the information; 12 reported that they would release information with caution; and three countries did not provide a response. Regarding the second piece, 22 respondents reported that they would release the information; 15 that they would release the information with caution; and four countries that they would withhold the information.

**Recommendations**

- NFPs should understand the notification requirements in other sectors, including the animal health services.
- NFPs should have a basic understanding of key principles applicable to all core capacities of IHR, including emergency risk communication, in order to effectively liaise with specialist counterparts responsible for these core capacities. To facilitate this liaison function logistically, maintaining an up to date list of contact information is recommended.

**Objective 5:**

To review arrangements for managing health events at designated points of entry (under IHR Articles 20.1 and 21.1).

Points of entry (PoEs) are at the front line of prevention, detection and response to public health events that may arise via international travel and transport. This raises opportunities and risks for the prevention and management of public health emergencies at PoEs, which are inherently different from those encountered in other settings. Under Article 20.1 of the IHR (2005), States Parties are expected to formally designate PoEs based on a risk assessment, taking into account, among other factors, the population density living nearby; volume and frequency of travellers, goods and conveyances; and public health risks that originate locally or in the places from which travel originates.

In addition, the IHR (2005) specifically identifies the routine and emergency capacity requirements for designated PoEs and these capacities should be routinely assessed and reported on through the States Parties Annual Report (SPAR).

In Inject 11 of Exercise JADE, participants were asked to provide a list of all designated airports where an aircraft with a suspected case of AFCS aboard could land. Of the 39 responses received for this inject, all participants provided a list of designated points of entry.

**Identified designated points of entry (PoE)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identified all designated PoE</td>
<td>80%</td>
</tr>
<tr>
<td>Did not identify any designated PoE</td>
<td>10%</td>
</tr>
<tr>
<td>Identified some designated PoE</td>
<td>20%</td>
</tr>
<tr>
<td>Identified additional PoE</td>
<td>0%</td>
</tr>
</tbody>
</table>
Over 70% of NFPs identified all designated points of entry. This result is very positive as it is critical that NFPs have an overview of capacities for the prevention and management of public health risks at points of entry in their countries and have the means and lines of communication to ensure coordination.

The second part of Inject 11 requested NFPs to identify three priority actions that should be taken at designated points of entry in order to prepare for and manage the arrival of the aircraft with the suspected case of Acute Complex Feline Syndrome (ACFS). While it is unlikely that a NFP (in their function) would ever be asked to provide advice on measures to be taken at an international airport Several participants also provided copies of airport contingency plans which would be activated in such an event.

Participants identified the most challenging and important aspects of managing a public health events at designated points of entry: isolation, treatment and transportation of affected or suspected passengers, collection of information, and keeping track of other passengers who may have had close contact with infected people.
“Very well organized. Good and challenging scenario.”
6. NFP feedback and evaluations

6.1 General observations from participants

Pace of the exercise
Participants noted that the pace of the exercise was fast, that the scenario required multisectoral communication and they therefore had insufficient time to consult relevant institutions and to formulate comprehensive responses. Some participants had technical issues during the exercise, which they mentioned not having been able to overcome due to the pace.

Recommendations
The exercise management team may consider either:
- providing a more simple scenario in the future
- lengthening the exercise time to give more time to complete individual injects (more time- and resource-intensive);
- attaching fewer documents to emails (to make emails “lighter” and avoid technical issues)
Intersectoral collaboration
Several NFPs commented on how the exercise is an opportunity to practice intersectoral involvement.

Recommendation
The exercise management team should continue developing scenarios that require consultation and communication with different sectors. Participants must have time to coordinate with and prepare for the involvement of relevant sectors.

6.2 Results of the evaluation survey
In addition to the “hot wash” (debriefing 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 were ranked 1 (lowest, strongly disagree) to 5 (highest, strongly agree). Free text comments were consolidated and edited for clarity.

1. The exercise achieved the stated purpose and objectives comments were consolidated and edited for clarity.

2. This exercise is useful tool to strengthen the IHR NFP network in the Europe Region
3. I plan to participate in Exercise JADE next year

4. The exercise improved my understanding of my role and function within the IHR system

5. The exercise increased my understanding of the assessment of public health events using IHR (2005) Annex 2 and the notification process and EIS posting
6. The JADE exercise contributed to improving my understanding of how and when to communicate with the WHO IHR Regional Contact Point using registered contact details

7. The exercise improved my understanding of necessary arrangements for managing health events at designated points of entry (under IHR Articles 20.1 and 21)
8. The exercise facilitated personal skill development

```
Number of Respondents

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
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<td>0</td>
<td>2</td>
<td>4</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>IHR notification process</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Assessment of PHEIC using annex 2</td>
<td>2</td>
<td>4</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Managing health events at PoEs</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
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9. Please choose which objective (or task) was the most challenging during the exercise

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Number of Respondents

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<th>Finding information in EIS</th>
<th>IHR notification process</th>
<th>Other</th>
<th>Assessment of PHEIC using annex 2</th>
<th>Inject 2 news update</th>
<th>Managing health events at PoEs</th>
<th>Providing contact of veterinary counterpart</th>
</tr>
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<td>2</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Finding information in EIS</td>
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<td>0</td>
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<tr>
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<tr>
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<td>0</td>
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<td>0</td>
</tr>
</tbody>
</table>
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Note: Answers to “Other”: intersectoral communication and risk communication decision-making

10. Based on this exercise, what do you recognize as your key strengths and areas for improvement?

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<table>
<thead>
<tr>
<th>Strengths(^a)</th>
<th>Areas for improvement(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork and effective collaboration with international authorities</td>
<td>IT-related issues</td>
</tr>
<tr>
<td>Knowledge, training and regular use of the EIS and IHR instruments</td>
<td>Multisectoral collaboration</td>
</tr>
<tr>
<td>Having standard operating procedures (SOPs) in place</td>
<td>Lack of familiarity with IHR</td>
</tr>
</tbody>
</table>
```

\(^a\)Most common feedback from participants
11. Can you identify any follow-up actions from the exercise? If Yes, please share your top three priority actions you plan to take:

- Optimizing and strengthening human resources
- Technical resources
- Multisectoral approach

Most common feedback from participants

12. The information contained in the Participant Guide was clear and useful for me to participate in this exercise

13. The scenario was realistic

14. The questions and tasks were clear
15. The post exercise debrief ("hot wash") was useful to share my experiences and hear from other participants

16. The pace of the exercise was appropriate

17. Please give your recommendations for how the exercise could be improved next year?

Recommendations*

- Longer time frame needed for the exercise, and between the end of the exercise and the "hot wash"
- Attach fewer documents to emails (avoid email capacity being reached)
- Use different health threat events in future exercise
- Include fake news
- Include real phone calls

*Most common feedback from participants
18. What exercise scenario (story or event) would you find most relevant for IHR Exercise JADE 2020?

CoV, coronavirus
Note: Answers to “Other”: antimicrobial resistance event

19. Which optional NFP functions would you like to see included in Exercise JADE 2020 in addition to the mandatory NFP functions?

PoE: point of entry
Note: Answers to “Other”: Intersectoral communication and exchange of information, coordinating analysis of national public health events and risks, disseminating information to government sectors, engaging with WHO on collaborative risk assessment.
“Nicely captured the multisectoral nature of IHR and how communication channels between the sectors should be established in peace time.”
7. Conclusions

Exercise JADE 2019 achieved its objectives, including active participation from 46 out of a possible 55 States Parties invited. There was good participation by NFPs, with some differences in capacity, highlighted by the responses to the injects. Differences in capacity are expected and can be attributed to staff turnover within the NFP function, the size of the NFP team and familiarity with the tasks requested.

The exercise 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 (PHEIC), which requires notification, means that these processes are not practiced very often. Exercise JADE therefore gives NFPs an opportunity to annually validate, refine, practice and assess their IHR functions, procedures and communication with WHO.

The debrief sessions with participants and the Exercise Management Team, indicated that JADE is a valuable learning and training exercise. Almost all participants indicated that they would like to participate in this exercise next year. The comments and feedback received from the online evaluation survey will greatly assist in guiding the direction and design for Exercise JADE 2020.

Post exercise, is the best time to implement refinements to strengthen the NFP function where needed. It is recommended that the NFP function to be setup in such a way, in order to facilitate the NFP accessibility at all times and not to rely on the availability of a particular individual.

Exercise JADE has now been established as an annual IHR exercise for the WHO European Region. We look forward to next year and continuing to work together to prevent, prepare for, detect and respond to all public health threats and emergencies in our Region.

National Focal Point of Spain during JADE exercise
“The exercise gave us opportunity to renew our knowledge about IHR functioning and communication.”
Annex 1: Exercise JADE scenario outline

Day X

Social media and local press reports an illness in cats. Users of social media post comments and messages stating that their cats have become ill due to an unknown disease.

A leading newspaper publishes a story about the mysterious deaths among cats. This incident is very unusual and the national veterinary services ask for more details. As the disease affects household pets and wild cats, there is concern that this could be spreading through the general feline population.

All cases reported indicate that the disease seems to be concentrated in one province.

X + 1 week

In a local news update, a Chief Veterinary Officer describes the unknown illness in cats as “serious” and recommends that the government undertakes a further investigation of the matter. In other news, seven children at a primary school become ill, near to the suspected source.

A news video (News video 01) reports on the mystery illness, stating that cat flu is usually treatable and preventable with vaccines, but nothing seems to be helping the cats in this case. Local Veterinary Practices state that the illness falls outside a routine cycle of illness in cats.

X + 1 week

In a report from the Veterinary Assessment Team, the Ministry of Agriculture highlights to the Ministry of Health that there may be a connection between the unexpected illness in cats and the subsequent development of symptoms in humans. During the investigation, the team finds that cases of illness occurred in humans who kept infected cats as pets or worked with infected cats (particularly veterinary workers).
X + 2 weeks

The Public Health Institute is informed of three cases with fatal outcome (including two children), and 35 other cases referred with similar symptoms.

Public health authorities conduct further investigation. Twelve children start presenting symptoms of the disease. Due to an international sports competition, other children (including from neighbouring countries) might have been affected.

The Public Health Institute strongly recommends the immediate notification to the public that laboratory investigation is underway to determine the origin and seriousness of the disease. In addition, further investigation into the possible international spread is recommended.

X + 2 weeks

Rapid Response Team (RRT) Report – medical records indicate that besides 31 hospitalized patients, additional 43 people presented the same symptoms. Three deaths are confirmed and believed to be linked with the outbreak.

Children who attended the international sports competition present symptoms and may have been contagious at the time of the event.

Specimens are obtained from seven of the 10 cases interviewed and are sent to the national reference laboratory. The population appears to seek health care late as early onset symptoms are mild in most people.

X + 3 weeks

Updated press release – The Public Health Institute, working with veterinary authorities in the Ministry of Agriculture confirms via laboratory analysis, the disease outbreak to be a novel arenavirus. The disease is named ACFS.

The outbreak of the disease spreads to the capital; 121 human cases are confirmed. Total number of deaths reaches 12 people, with another 50 critically ill. The disease is determined as zoonotic, animal to animal, animal to human and human to human. It is highly contagious. The Public Health Institute starts contact tracing of each confirmed case.

A reference Laboratory Report is received, indicating the novel species of arenavirus.
**X + 3 weeks**

Updated news report – the Public Health Institute is racing to contain the outbreak of the disease known locally as “cat flu” but described by health authorities as Acute Complex Feline Syndrome (ACFS). Twelve people are reported dead, almost half of these children, and the disease is spreading to the country’s capital.

News video 02 – The Ministry of Health races to contain the outbreak of the disease. The Ministry of Health establishes wards at local health facilities to try to isolate victims of the illness and to limit its spread.

**X + 5 weeks**

Incident on Flight 616 in-bound – Ministry of Transport and Civil Aviation shares information that an inbound international flight on route to the capital is reporting two sick passengers. According to a doctor on board the two passengers present symptoms that could be ACFS. In an attempt to avoid infection, flight attendants isolate the two sick passengers from other passengers.

**X + 6 weeks**

Convening an IHR Emergency Committee – the WHO Director-General (DG) announces that they are convening an IHR Emergency Committee to determine if the ACFS outbreak constitutes a Public Health Emergency of International Concern (PHEIC).

**X + 6 weeks**

PHEIC – The Director-General of the World Health Organization declares the ACFS outbreak a PHEIC. The IHR Emergency Committee is of the view that a coordinated international response is required.

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Please contact the Exercise Management Team, should you wish to receive the individual injects or additional information.

**JADE Exercise Management Team**

WHO Regional Office for Europe
eurocme@who.int
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.

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