IHR event communication exercise
SAPHIRE 2023
South-East Asia Regional Practice of All-Hazard IHR Event Communication. 30 March 2023. Summary report
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## Abbreviations and acronyms

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<tr>
<td>EIS</td>
<td>Event Information Site</td>
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<tr>
<td>EOC</td>
<td>Emergency Operations Centre</td>
</tr>
<tr>
<td>IMST</td>
<td>Incident Management Support Team</td>
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<tr>
<td>NFP</td>
<td>national focal point</td>
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<tr>
<td>JEE</td>
<td>joint external evaluation</td>
</tr>
<tr>
<td>PHEIC</td>
<td>public health emergency of international concern</td>
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<tr>
<td>RRA</td>
<td>rapid risk assessment</td>
</tr>
<tr>
<td>SAPHIRE</td>
<td>South-East Asia Regional Practice of All Hazard IHR Event Communication</td>
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<tr>
<td>SOP</td>
<td>standard operating procedure</td>
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<tr>
<td>SPAR</td>
<td>States Party Self-assessment Annual Reporting Tool</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>WAHIS</td>
<td>World Animal Health Information System</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WHO HQ</td>
<td>WHO headquarters</td>
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<tr>
<td>WHO SEARO</td>
<td>WHO Regional Office for South-East Asia</td>
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Executive summary

The International Health Regulations (2005) [IHR (2005)] lay 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 the IHR (2005) national focal points (IHR NFPs) in ensuring effective and timely IHR event communication is critical. The COVID-19 pandemic and other recent emergencies have reiterated the need to continue strengthening the roles and functions of NFPs.

The South-East Asia Regional Practice of All Hazard IHR Event Communication (SAPHIRE) 2023 was designed to practise and test IHR event communication in the Region, to contribute to strengthening public health emergency preparedness and response capacities. SAPHIRE 2023 was proposed with the following objectives:

1) Validate the accessibility of the IHR NFPs and WHO IHR contact points using registered contact details.
2) Provide an opportunity for IHR NFPs to practise assessment of public health events using the decision instrument contained in Annex 2 of the IHR (2005).
3) Promote understanding and familiarity of focal points in both Member States and WHO with regard to the roles of IHR NFPs, and IHR (2005) principles and obligations in the context of IHR event communication.
4) Identify lessons to further improve IHR event communication and related systems in the Region.

SAPHIRE 2023 used a fictional scenario involving cases of infection with a Nipah-like virus; it was carried out on 30 March 2023. Approximately 95 participants from all 11 WHO South-East Asia Member States participated in SAPHIRE 2023. The exercise ran for 3.5 hours and involved a total of 19 injects, simulating events over an approximate period of 2.5 months. The majority of the participating country teams responded to the injects as required.

Overall, the respondents at the debriefing session and exercise evaluation provided positive feedback on SAPHIRE 2023 and supported the idea of organizing it annually.

Based on the observations of the exercise, the following actions are proposed:

- IHR NFPs are encouraged to keep WHO informed of the up-to-date contact information of the IHR NFPs, which will be critical during actual emergencies.
- Ensure that the IHR NFPs and the relevant technical units are trained in conducting assessment of public health events of potential international concern, using the IHR (2005) Annex 2.
- Ensure that the IHR NFPs are provided with the necessary authority, capacity, training and resources to effectively carry out the functions required by the IHR (2005), in line with the WHO guide for IHR NFP.¹
- IHR NFPs are encouraged to contribute to the development of event information site (EIS) articles to share information about public health events in a timely manner.

• IHR NFPs of all countries of the Region are encouraged to develop, review and update the SOPs for IHR event communication on a regular basis or on the basis of after-action reviews or simulation exercises.

• Ensure that communication channels between the IHR NFPs and relevant sectors and technical units are well established and functional in respective countries.

• It is advisable that an institutional email account, dedicated to IHR event communication, which can be easily accessed by all IHR NFP team members (such as through group inbox, automatic email forwarding), be made available.
Introduction

As outlined in the Regional Strategic Roadmap on health security and health system resilience for emergencies 2023–2027 for the WHO South-East Asia Region, the implementation of the International Health Regulations (2005) [IHR (2005)] is the cornerstone of strengthening systems to manage health security threats and mitigate their impact.

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. Effective IHR event communication, including consultation, notification, information-sharing and event verification, is an important pillar for achieving the objectives of the IHR (2005) to prevent, protect against, control and provide a public health response to the international spread of a disease.

The role of the national IHR focal points (IHR NFPs) in ensuring that public health risks are notified to WHO, verified when requested and consequently responded to under the IHR (2005) is critical. Designating and equipping IHR NFPs for fulfilling these functions is mandatory for all States Parties and laid out in Article 4 of IHR (2005). To respond to potential events effectively and efficiently, particularly those which may have the potential of becoming a public health emergency of international concern (PHEIC), timely and accurate communication between IHR NFPs and the WHO IHR contact point plays a crucial role. The COVID-19 pandemic and other recent emergencies have reiterated the need to continue strengthening the roles and functions of NFPs.

To test and practise the functional capacity of communication and coordination between IHR NFPs and WHO IHR contact points within the Region, a simulation exercise (SimEx) was proposed. Simulation exercises are one of the four components of the global IHR Monitoring and Evaluation Framework (MEF). Experience has shown that this is an effective way for countries to practise and test their IHR capacities, facilitate learning and catalyse continuous improvement of their public health emergency preparedness and response systems.

The South-East Asia Regional Practice of All Hazard IHR Event Communication (SAPHIRE) 2023 was designed to practise and test IHR event communication based on a fictional scenario involving cases of infection with a novel variant of Nipah virus (a henipavirus). SAPHIRE 2023 was the first regional IHR event communication exercise in the WHO South-East Asia Region. It has been proposed that SAPHIRE can be organized annually.

2 https://www.who.int/publications/i/item/9789290209959
Goal and objectives

The goal of SAPHIRE is to contribute to strengthening public health emergency preparedness and response capacities.

The objectives of Exercise SAPHIRE 2023 were to:
1) validate the accessibility of the IHR NFPs and WHO IHR contact point using registered contact details;
2) provide an opportunity for IHR NFPs to practise assessment of public health events using the decision instrument contained in Annex 2 of the IHR (2005);
3) promote understanding and familiarity of focal points in Member States and WHO with regard to the roles of IHR NFPs, and IHR (2005) principles and obligations in the context of IHR event communication; and
4) identify lessons to further improve IHR event communication and related systems in the Region.
Exercise planning, scenario and delivery

Exercise scenario

The scenario was based on an outbreak of a novel variant of Nipah virus that was transmitted from animals to humans and from humans to humans, occurring in the IHR NFP’s country. The exercise ran for 3.5 hours. The scenario involved a total of 19 injects, simulating events over an approximate period of 2.5 months. The full scenario, including the injects and responses required from IHR NFPs, is described in Annexure 3.

Exercise planning team

The exercise was designed and managed by the Health Emergencies Programme team of the WHO Regional Office for South-East Asia (WHO-SEARO) and WHO headquarters (WHO HQ), with inputs from the WHO country offices.

Exercise schedule

On 29 March 2023, prior to the exercise, WHO reached out to each of the participating IHR NFPs over phone to verify their listed contact information.

On 30 March 2023, the exercise started at 9:00 a.m. (IST) and ended at 12:30 p.m. (IST). All injects were delivered by email. Following the exercise, a “hotwash” session was held with all participating countries.

Exercise participants

Exercise SAPHIRE involved approximately 95 individuals from the participating teams, representing the 11 WHO South-East Asia Member States (Bangladesh, Bhutan, the Democratic People’s Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand and Timor-Leste), and WHO staff members and consultants. Annexure 1 shows a selection of photographs of the participants in action during the exercise.

The participating NFP teams played their usual role as IHR NFPs and the WHO IHR duty officers at WHO-SEARO acted as the WHO IHR contact points. The Control Team from WHO-SEARO facilitated the conduct of the exercise, managing the sequence of events, including setting the scenario and sending injects. The simulators, also played by WHO staff members, included the Director of the National Public Health Division (simulator A) and other persons or agencies, such as local public health units, public health laboratories, communications teams and animal health department (simulator B).
Participant performance and feedback

Responses by IHR NFPs to the exercise injects

Ten of the 11 IHR NFPs, who were invited, actively participated in Exercise SAPHIRE. A monitoring sheet of responses from respective NFPs to the injects was completed by WHO; the participants were also encouraged to complete their own log sheets to record their actions. Table 1 summarizes the number of teams that responded to the injects with some expected tasks.

Table 1. Number of participating teams that correctly completed the tasks required by the scenario injects

<table>
<thead>
<tr>
<th>Response required to injects</th>
<th>Number of Member States that responded (n=11)</th>
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<tr>
<td>Inject 4 – reply to the public health unit</td>
<td>10</td>
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<tr>
<td>Inject 4 – reply to the animal health division</td>
<td>10</td>
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<td>Inject 4 – advise that a rapid response team be deployed</td>
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<tr>
<td>Inject 5 – send top three EIS postings</td>
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<tr>
<td>Inject 5 – send top three World Animal Health Information System (WAHIS) postings</td>
<td>9</td>
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<td>Inject 9 – respond to request regarding notification, as per Annex 2*</td>
<td>6</td>
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<tr>
<td>Inject 11 – send EIS posting</td>
<td>10</td>
</tr>
<tr>
<td>Inject 13 – provide epidemiological information to the Freeland IHR NFP**</td>
<td>10</td>
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*This only includes those teams that specifically defined their decision, based on Annex 2 of IHR (2005). Please refer to Annexure 1 of this report.

**Freeland** is the imaginary country mentioned in the scenario. Please refer to Annexure 1 of this report.

Feedback through the debriefing session, “hotwash”

A debriefing session, “hotwash”, was held with the exercise participants – all IHR NFPs and WHO personnel involved – immediately after the exercise was concluded. As part of the “hotwash”, an online poll to assess the feedback on the exercise was conducted using SLIDO. The participants’ responses were as follows.

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• Did the exercise meet your expectations? 15 respondents (unable to determine the number of respondents by country team)
  o Yes (73%)
  o Partially (13%)
  o Not at all (13%)

• Did the exercise achieve the stated objectives? 17 respondents (unable to determine the number of respondents by country team)
  o Yes (65%)
  o Partially (29%)
  o Not at all (6%)

Following the online poll, the IHR NFPs were also asked to provide their feedback on SAPHIRE 2023. Selected feedback is summarized below:

• Overall, the participants provided positive feedback on the conduct of SAPHIRE 2023.

  “Such a simulation exercise has really helped us improve communication among the IHR bodies. Thanks for arranging such an exercise.”

  “National IHR focal points, alternate focal points and health emergencies staff were able to participate, along with a WHO Country Office focal person – a good opportunity to familiarize the whole team with the use of IHR (2005) Annex 2 and also communicate with regional IHR focal points. It was good that colleagues beyond IHR focal persons were able to participate in the exercise.”

  “Injects were good, simulating real-world scenarios – we had already planned a simulation exercise at the national level for a similar event. This experience will help us strengthen the planned exercise at the local level – we look forward to more regular exercises, perhaps annually.”

• Some participants felt that responding to 19 injects was a challenge, even though IHR NFPs are experienced in working under time pressure.

  “19 injects and no break for participants were a little bit challenging.”

  “Some injects need more time as there are many details to work on.”

  “Either more time should have been given for each inject or there should have been fewer injects (perhaps around 15); paucity of time led many to overlook several aspects.”

• Some NFPs provided constructive suggestions on how the exercise and IHR event communication could be improved.

  “It will be more interactive and fruitful if this simulation exercise can be held face to face on a regular basis.”
“Face-to-face interaction of NFPs will help build trust and expedite necessary IHR (2005) communication, a comprehensive and realistic exercise.”

“Need to involve other sectors in real time (e.g. from veterinary and agriculture units).”

“Need a manual or SOP [for IHR event communication] as the annex in the report or maybe a workshop in the future.”

Feedback through the evaluation forms:

Five participating IHR NFP teams completed the evaluation form. The responses were as follows.

- Four stated that the exercise fully met their expectations and one responded partially met.
- All five confirmed that the exercise had achieved its objectives.
- Three of the teams found the length of the exercise to be suitable; one found it too long and the other stated it was too short.
- Three teams found the pace to be suitable; however, two stated that there were too many injects.
- All five teams found the exercise useful, and its difficulty and scope suitable.
- One of the teams reported they were not able to access EIS.

In addition, the participants found the exercise useful in terms of highlighting the importance of having well-defined SOPs on event reporting and clear communication channels. They also suggested that they would like to see multisectoral collaboration in a future exercise and similar exercises face to face.
Observations and recommendations from the exercise

Overall, SAPHIRE 2023 was successfully organized engaging all 11 State Parties in the WHO South-East Asia Region. It had four specific objectives. This section summarizes the observations related to the four objectives as well as recommendations for IHR NFPs and WHO to further improve IHR event communication in the Region.

5.1 Validate the accessibility of the IHR NFPs and WHO IHR contact point using registered contact details.

A day prior to the exercise, IHR contact points at WHO-SEARO called the respective IHR NFPs to assess whether their respective registered contact numbers were working. Out of the 11 NFPs in the Region, IHR contact points at WHO-SEARO were not able to connect to four – either the calls were not answered, or the numbers could not be reached.

Recommendation
- IHR NFPs are encouraged to keep WHO informed of the up-to-date contact information of the IHR NFPs as this will be critical during actual emergencies.

5.2 Provide an opportunity for IHR NFPs to practise assessment of public health events using the decision instrument in Annex 2 of IHR (2005).

In SAPHIRE 2023 through the inject 9, the simulated Director of the Public Health Division requested an assessment of the outbreak using Annex 2 of the IHR (2005). Six of the 10 participating country teams were able to successfully undertake this task. However, it was the inject that received the lowest number of replies, out of the eight injects requiring a response.

Recommendation
- Ensure that IHR NFPs and the relevant technical units are trained in conducting assessment of public health events of potential international concern, using IHR (2005) Annex 2 – decision instrument.

5.3 Promote understanding and familiarity of focal points in Member States and WHO with regard to the roles of IHR NFPs, and IHR (2005) principles and obligations in the context of IHR event communication.

While the exact role and organization of the IHR NFP are left to each State Party to decide on, based on its specific national context, some functions and operational requirements for efficient communication are derived directly from IHR (2005); these are mandatory functions for IHR NFPs.
SAPHIRE 2023 was designed to practise such functions – it challenged both the team of the IHR NFPs and that of the IHR contact point at WHO SEARO. As the designated points of contact between WHO and States Parties, it is essential that NFPs are provided with the necessary authority, capacity, training and resources to effectively carry out the functions required by IHR (2005).

Under IHR (2005) Article 4, State Parties are required to designate the IHR NFPs, who should be accessible at all times for communication with WHO. While all State Parties in the Region had already established the IHR NFPs, WHO IHR contact point was unable to reach some of IHR NFPs at the registered phone numbers; one IHR NFP did not respond to the request from WHO IHR contact point during the exercise.

As per IHR (2005) Article 11, the WHO IHR contact point facilitates provision of information to other State Parties, in consultation with the affected countries. In order to fulfil this obligation, the WHO Secretariat established a secure web-based platform – the Event Information Site (EIS) – for communication with IHR NFPs. In SAPHIRE 2023, nine of the 10 participating IHR NFPs were able to smoothly access the EIS while one experienced technical difficulty and was unable to access the site.

Under IHR (2005) Article 6, State Parties are required to notify WHO about all events which may constitute a public health emergency of international concern based on the IHR (2005) Annex 2 decision instrument. While the majority of the participating IHR NFPs were able to conduct the assessment using IHR (2005) Annex 2, some IHR NFPs did not respond to inject 9 that required the use of Annex 2 and notification of the event to WHO (see Section 5.2).

Following the assessment using IHR (2005) Annex 2, the IHR NFPs were asked to notify the event to WHO and draft an article to be posted at the EIS using the template provided. Ten IHR NFPs successfully completed this task by sharing the information of the event.

IHR NFPs are responsible for obtaining and sharing the relevant information of public health events with the relevant sectors of a State Party. To fulfil these functions, IHR NFPs need to establish links and coordination mechanisms with existing national health emergency committees and mechanisms within and outside the health sector. In SAPHIRE 2023, IHR NFPs were asked to practise contacting the Chief Veterinary Officer; 10 out of 11 countries were able to take such action.

Article 44 of IHR (2005) encourages State Parties to collaborate with each other. Based on this article, State Parties are increasingly communicating with each other through their IHR NFPs, especially to exchange information on certain public health events or any relevant information on public health risks related to international travel and trade. In SAPHIRE 2023 the IHR NFP of Freeland requested for epidemiological and case information, and the participating IHR NFPs were asked to respond. Most of the participating IHR NFPs were able to undertake this task. In the spirit of Article 44, the IHR NFPs are encouraged to use the IHR communication channel to facilitate exchange of information to guide their risk assessment and readiness planning, when necessary.
Recommendations

- Ensure that the IHR NFPs are provided with the necessary authority, capacity, training and resources to effectively carry out the functions required by IHR (2005), in line with the WHO guide for IHR NFP.\(^4\)
- IHR NFPs are encouraged to contribute to the development of EIS articles and share information about public health events in a timely manner.

5.4 Identify lessons to further improve IHR event communication and mechanisms and related systems in the Region.

Through SAPHIRE 2023, it was recognized that SOPs needed to be in place to guide effective and timely IHR event communication. These SOPs should be reviewed and updated to improve the functionality of the IHR NFPs, especially on the basis of the findings from after-action reviews or simulation exercises. It is expected that the annual exercises of SAPHIRE will inform development or possible improvement of the SOPs.

At the national level, IHR NFPs are required to establish communication channels and coordination mechanisms with all relevant sectors for obtaining and disseminating event-related and other information concerning IHR (2005) implementation. It is important that such communication channels with relevant sectors and technical units are well established and functional in respective State Parties. In fact, several IHR NFPs suggested that they would like to see the engagement of key stakeholders from relevant sectors – for example, having the animal health counterpart physically participating in the exercise. Even as the primary purpose of SAPHIRE is to practise and test IHR event communication, engagement of additional stakeholders can be gradually expanded in its future iterations.

In the WHO South-East Asia Region and across the world, IHR NFPs usually communicate with WHO via the country offices while during the exercise, NFPs were asked to directly communicate with the IHR contact point at WHO-SEARO; this might have caused some confusion. While the role of the country offices will continue to be critical in facilitating IHR event communication, going forward, it will be important to review and clarify the options and procedures of IHR event communication.

The IHR NFP teams participated in SAPHIRE 2023 using their registered email addresses. However, it was noted that only two of the registered IHR email addresses were accounts created solely for IHR event communication. Most of the other email addresses were the personal email accounts of the members of the IHR NFP team. This may pose challenges to responding to IHR event communication in a timely manner, given that the IHR NFPs need to be accessible on a 24/7 basis in principle. The IHR NFP email should be an institutional email, managed by the IHR NFP team, instead of being a personal email account managed by an individual.

\(^4\) National IHR NFP guide. [https://cdn.who.int/media/docs/default-source/documents/emergencies/designation-ihr-national-focal-points.pdf?sfvrsn=1bcede8d7_9&download=true](https://cdn.who.int/media/docs/default-source/documents/emergencies/designation-ihr-national-focal-points.pdf?sfvrsn=1bcede8d7_9&download=true)
As in the real world, IHR event communication between IHR NFPs and the WHO IHR contact point takes place virtually through the registered emails and phone numbers. It will be reasonable to continue using these actual communication modalities and there may not be much value added in conducting SAPHIRE face to face. Nevertheless, some components of IHR event communication that require skill-building and in-depth interactions between IHR NFPs will involve face-to-face trainings or consultations, going forward.

Overall, the IHR NFPs provided positive feedback on the conduct of SAPHIRE 2023 and supported the idea of organizing the exercise annually. Learning from SAPHIRE 2023, future iterations can be designed to continuously improve the communication and collaboration between IHR NFPs and WHO IHR contact points, and among all IHR NFPs in the Region.

Recommendations

- IHR NFPs of all countries are encouraged to develop, review and update the SOPs for IHR event communication on a regular basis or on the basis of after-action reviews or simulation exercises.
- Ensure that communication channels between IHR NFPs and relevant sectors and technical units are well established and functional in respective countries.
- It is advisable to have an institutional email account dedicated to IHR event communication, which can be easily accessed by all IHR NFP team members (such as through group inbox, automatic email forwarding).
Annexes

Annex 1. Photo images from SAPHIRE 2023

Bhutan

India

Maldives

Nepal

Sri Lanka

Thailand
IHR event communication exercise

SAPHIRE 2023

South-East Asia Regional Practice of
All Hazard IHR Event Communication

PARTICIPANT GUIDE

30 March 2023
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Introduction

The International Health Regulations (2005) [IHR (2005)] lay the foundation for operational communications and coordination between State Parties and WHO in the detection, assessment and management of a public health event. Effective event communication between national IHR focal points (IHR NFPs) and the WHO IHR contact point is essential for timely communication and information-sharing around public health events and for implementation of the IHR (2005).

IHR event communication:
- facilitates timely risk assessment, decision-making and response;
- includes public health event reporting, verification, notification, information-sharing and risk assessment using the decision-making instrument contained in Annex 2 of the IHR (2005); and
- may also involve communication to determine if an event constitutes a public health emergency of international concern (PHEIC) and the associated emergency response under the IHR (2005).

Strengthening health emergency preparedness and response has been an important health priority in the WHO South-East Asia Region. Emergency risk management was identified as a Regional Flagship Priority Programme in 2014 and was further endorsed by health ministers of the Member States in the Region in the Delhi Declaration – Emergency Preparedness in the South-East Asia Region at the Seventy-second session of the WHO Regional Committee for South-East Asia in 2019. Member States have also made significant progress on building the IHR (2005) Core Capacities.

As outlined in the recently endorsed Regional Strategic Roadmap on health security and health system resilience for emergencies 2023–2027, the implementation of the IHR (2005) is the cornerstone of strengthening systems for early detection, public health response and mitigation of the impact of any hazard that may arise in future.

Major international public health events, such as the influenza A(H1N1) pandemic of 2009, the Middle East respiratory syndrome (MERS) outbreak since 2012, the avian influenza A(H7N9) event in 2013, the Ebola virus disease outbreaks in 2014 and 2019, the COVID-19 pandemic and the multicountry outbreak of Mpox, continue to highlight the importance of IHR event communication to guide timely information-sharing and risk assessment, and coordinated regional and global response.

To effectively and efficiently respond to a potential risk associated with public health events, which may constitute a public health emergency of international concern (PHEIC), timely and accurate communication between IHR NFPs and the WHO IHR contact point plays a crucial role. Effective communication, involving consultation, notification, information-sharing and event verification, is an important pillar to achieve the objectives of the IHR (2005) to prevent, protect against, control and provide a public health response to the international spread of a disease.
The Exercise titled “South-East Asia Regional Practice for All Hazard IHR Event Communication (SAPHIRE)” will be conducted for the first time in the WHO South-East Asia Region in 2023; it is expected to be organized annually. The exercise is designed for IHR NFPs and the WHO IHR contact point at WHO-SEARO to practise the various aspects of IHR event communication in a safe environment, using a simulated public health event. The WHO Country Office will also play the role expected of it, following the standard operating procedures (SOPs) for IHR event communication.

SAPHIRE is a functional exercise, requiring participants to respond in real time to incoming information about a public health event and undertake simulated emergency functions that will reflect their roles in an actual situation. The exercise will last for approximately three-and-a-half hours and will be followed by the “hotwash” from the exercise-facilitating team.

**Reminder**

The focus of the exercise is on practising IHR event communication, not expertise in technical areas. However, it may be useful to familiarize yourself with the key concepts of outbreak investigation and response, and the structures in place in your country, area or territory.
Objectives

The objectives of Exercise SAPHIRE 2023 are to:

1. validate the accessibility of the IHR NFPs and the WHO IHR contact point using registered contact details;
2. provide an opportunity for IHR NFPs to practise assessment of public health events using the decision instrument contained in Annex 2 of the IHR (2005);
3. promote understanding and familiarity of staff members of both Member States and the WHO Secretariat with regard to the roles of IHR NFPs, and IHR (2005) principles and obligations in the context of IHR event communication; and
4. identify lessons to further improve IHE event communication and related systems in the Region.

Exercise scenario and design

The exercise will use a simulated, artificial scenario designed to test the specific elements of a response. As such, the scenario may not reflect a real-world situation – participants should keep this in mind during the exercise and should accept these artificialities. Please do not be overly concerned about issues associated with the scenario itself. The objective is to work with the scenario to facilitate your actions, rather than to challenge the scenario or seek to resolve every possible detail.

The exercise is designed to test IHR event communication during the simulated event. It will also provide an opportunity to access the Event Information Site (EIS) online portal. This year, the scenario will be based on an outbreak of a new emerging disease. No technical knowledge of outbreak investigation or response is required to participate in the exercise – the focus of the exercise is on practising IHR event communication.

During the exercise, the IHR NFPs will receive a number of detailed communications (injects), which will provide information on the evolving scenario and trigger tasks that you must work through within your own domestic context. As you receive each inject, consider what you will do if this were a real-life event and whom you will contact, in line with the IHR (2005) and your own national policies and procedures.

Remember that this is a simulation exercise. There is no right or wrong answer and individual performance is not being tested. The aim of the exercise is to provide a safe environment for institutional and mutual learning by identifying strengths and areas for improvement, and thus help prepare for a real emergency.
Conduct of exercise

SAPHIRE 2023 will be held on 30 March 2023. The exercise will take approximately three-and-a-half hours in real time. The exercise scenario will include simulated times and dates communicated in the injects. Participants can expect to have between 10 and 30 minutes to address each inject, depending on the complexity of the inject or the expected response. No extra time will be available and new injects may arrive before participants have completed the previous inject. Comprehensive reports are not expected within the time frame of the exercise – bullet points are sufficient for most of the required tasks.

All participants are required to record their actions taken during the exercise. We suggest that participants record all actions taken and the results of any assessment made, using the action log sheet (Annexure B), and inform the Controller (SEAROController@who.int) that the action has taken place. In addition, please share a scanned copy of your completed action log sheet at the end of the exercise with the Controller (SEAROController@who.int).

The exercise play will be followed by a “hotwash” debrief, conducted over Zoom, to review the exercise and share lessons. We would like to seek your feedback on the “hotwash”. In addition, SLIDO may be used to seek your feedback on a few evaluation questions.

Zoom link for hotwash
Thursday, 30 March 2023, 12:30 pm – 1:30 pm (UTC +05:30) (IST)
https://who-e.zoom.us/j/95756875418?pwd=VE5naGFhcUFZS3dDZjkyMG5TTTHVNdz09
Meeting ID: 957 5687 5418
Passcode: 583940
Join by SIP: 95756875418@zoomcrc.com

NFPs are encouraged to join the exercise from the Emergency Operations Centre (EOC) or other appropriate local venue in respective countries.

Email will be the primary means of communication during the exercise, with telephone used to check communication and troubleshoot. Videoconferencing through Zoom will be used only for the hotwash.

If you face any issues during the exercise, please contact Exercise Control via telephone (+91 88600 99933) or email (SEAROController@who.int). Please also report any issues in the post-exercise evaluation form (Annexure E) to help us with future planning.

We encourage participants to take photographs during the exercise and share them with the Exercise Control after the exercise. Those photographs of the participants or screenshots of the event may be used by WHO. By sharing your photograph in the exercise, we assume that the participants consent to the worldwide use of their likeness, as depicted in exercise photograph(s), videos and/or sound recordings (the “media”) made for or by the World Health Organization (“WHO”), 20 Avenue Appia, 1211 Geneva 27, Switzerland, as well as in publicity concerning the same for the following subject(s): simulation exercises. If you would not like to have your likeness shared, please inform Exercise Control (SEAROController@who.int).
Whom to contact during the exercise

The WHO-SEARO IHR contact point will participate in the exercise and can be contacted using the usual email address (seihr@who.int), when you are going to communicate with the WHO-SEARO IHR contact point as part of the exercise.

For the communication representing the IHR NFPs, please send your emails from the email addresses registered with WHO as the IHR NFP contacts; however, if you wish to use additional or alternative emails for the exercise, please inform the WHO IHR contact point (seihr@who.int) prior to the exercise.

Simulators will play the role of agencies not participating in the exercise, whom you may wish to contact in the context of the scenario.

- If you would like to contact the Director of the National Public Health Division, please write to SEAROSimulatorA@who.int.
- If you would like to contact any other person or agency (e.g. local public health units, public health laboratories, communication teams or animal health department), please contact SEAROSimulatorB@who.int.

WHO Country Office staff may act as facilitators to provide support to IHR NFPs when and if appropriate.

During the exercise, please include your country name in the subject line of every email. Please also clearly identify exercise messages by including at the start of each email:

EXERCISE, EXERCISE, EXERCISE

or

THIS IS AN EXERCISE MESSAGE

In all email communications, please copy the Exercise Controller (SEAROController@who.int). In addition, if a participant needs to withdraw from the simulation at any time, the notification email should immediately be sent to the Controller via email.

For this exercise, we encourage IHR NFPs to directly communicate with the WHO IHR contact point. However, we also request IHR NFPs to coordinate with WHO country offices – if any country decides to communicate via the focal person at the WHO Country Office, we respect such a decision. If the IHR NFP and the IHR contact point communicate directly, the focal person at the WHO Country Office should be copied in all exercise communications.

Please DO NOT email or copy any real person or agency outside the exercise, as this can lead to confusion and concern. If players want to communicate with another relevant agency (e.g. their wildlife authority or NFPs in other countries), they should record this pretended “action” using the action log sheet (Annexure B) and notify the Controller via email (SEAROController@who.int) that the action has taken place. Alternatively, they can also write to those agencies to SEAROSimulatorB@who.int, as mentioned above.

Internal discussions within the office of the NFPs are encouraged to facilitate exercise play,
Evaluation

We appreciate your feedback on the exercise for us to improve future rounds of exercises. We carry out some part of the exercise evaluation during the hotwash. In addition, we would be grateful if you could please complete the evaluation form (Annexure E), including any further comments and suggestions, and send it to us at SEAROController@who.int.

Begin all communication with the words: EXERCISE, EXERCISE, EXERCISE
EXERCISE REMINDERS

1. Include your country, area or territory name in the subject line of every email to help us track communications.

2. Start every exercise communication with:

   EXERCISE, EXERCISE, EXERCISE
   or
   THIS IS AN EXERCISE MESSAGE

3. Copy every email communication to Exercise Controller (SEAROController@who.int).

4. Email the Simulator to ‘contact’ other agencies during the exercise. DO NOT email or copy any person or agency not directly participating in the exercise.
   o If you would like to contact the Director of the National Public Health Division, please write to SEAROSimulatorA@who.int
   o If you would like to contact any other persons or agencies (e.g. local public health units, public health laboratories, communications teams or animal health department), please contact SEAROSimulatorB@who.int

5. Contact Exercise Control (+91 88600 99933- and SEAROController@who.int) to report and resolve any problems during the exercise. Report any issues in the post-exercise evaluation form to help with future planning.

6. Please do not fight the scenario. Expect information to be incomplete or unusual – just as it would be in a real emergency.

7. Record all of your activities using your local log, and always notify the controller via email if you have taken an action (SEAROController@who.int).

8. If you encounter any problems during the exercise, please record them on the problem log sheet (Annex C)

9. Participate in the “hotwash” debrief at the end of the exercise, and contribute in the evaluation of the exercise.

10. Enjoy the exercise!

If a real event occurs during the exercise, use the subject line

ATTENTION-ATTENTION THIS IS NOT AN EXERCISE

in your emails related to the event. This will ensure that real messages to the WHO IHR contact point are identified and prioritized.
ANNEXES

Annex A  Simulation contacts
Annex B  Action log sheet
Annex C  Problem log sheet
Annex D  Exercise schedule
Annex E  Exercise evaluation form

We’d love to see you in action! Send your photos to SEAROController@who.int
Annex A: Simulation roles, contacts and links

- **Players (IHR NFPs and IHR Contact Points):** Players are expected to carry out event-related communications in accordance with existing operating procedures within their country, area or territory.

- **WHO IHR Contact Point (seihr@who.int):** The WHO IHR Contact Point will perform its regular role during the exercise, in the context of the scenario.

- **Exercise Controller (SEAROController@who.int):** Provides direction and control of the exercise. Exercise Control will manage the sequence of events, including setting the scenario and sending injects, and will monitor progress of the exercise. Please copy Exercise Control in all exercise messages.

- **Simulators (SEAROSimulatorA@who.int and SEAROSimulatorB@who.int):** Plays the role of agencies not participating in the exercise, that you may wish to contact in the context of the scenario. May not be able to respond to all messages given the limited scope of the exercise.
  
  - If you would like to contact the Director of the National Public Health Division, please write to SEAROSimulatorA@who.int
  
  - If you would like to contact any other persons or agencies (e.g. local public health units, public health laboratories, communications teams or animal health department), please contact SEAROSimulatorB@who.int

- **Facilitators:** Where present, WHO country office staff may facilitate and provide support to IHR NFPs when and if appropriate.

- **Getting help:** If urgent, contact Exercise Control via telephone +91 88600 99933

Link to zoom video conference for the Hot Wash
Thursday, March 30, 2023 12:30 PM-1:30 PM (UTC+05:30) (IST)  
https://who-e.zoom.us/j/95756875418?pwd=VE5naGFhcUFZS3dDZjkyMG5TTTHVNdz09  
Meeting ID: 957 5687 5418  
Passcode: 583940  
Join by SIP: 95756875418@zoomcrc.com

**NOTE:** Do not use any email addresses other than those listed as communication to other addresses will not be answered and may cause confusion or concern to outside individuals.

**REMEMBER**
Copy ALL exercise emails to Exercise Control at  
SEAROController@who.int
Annex B: Action log sheet – Exercise SAPHIRE 2023

Name of country ________________________  Recorded by ________________________

Page ____ of ____

<table>
<thead>
<tr>
<th>Time/Date</th>
<th>Activity (e.g. Call to/ received from; Assessment conducted; consulted a stakeholder)</th>
<th>Issue/Information Requested Or Provided; assessment results</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

Please send the completed sheet via e-mail to SEAROController@who.int immediately after the exercise (latest by 31 March 2023)
Annex C: Problem log sheet – Exercise Saphire 2023

<table>
<thead>
<tr>
<th>Time</th>
<th>Problem</th>
<th>Actions tried or potential actions to be taken in the future</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

- Please send the completed sheet via e-mail to SEAROController@who.int after the exercise (by 31 March 2023 latest) if there is an issue to complete online
Annex D: Exercise Saphire 2023 schedule

### 30 March 2023 (Thursday)

<table>
<thead>
<tr>
<th>Participating Country</th>
<th>Local Time</th>
<th>Indian Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>09:30 – 13:50</td>
<td>09:00 – 13:20</td>
</tr>
<tr>
<td>Bhutan</td>
<td>09:30 – 13:50</td>
<td>09:00 – 13:20</td>
</tr>
<tr>
<td>Democratic People Republic of Korea</td>
<td>12:30 – 16:50</td>
<td>09:00 – 13:20</td>
</tr>
<tr>
<td>India</td>
<td>09:00 – 13:20</td>
<td>09:00 – 13:20</td>
</tr>
<tr>
<td>Indonesia</td>
<td>10:30 – 14:50</td>
<td>09:00 – 13:20</td>
</tr>
<tr>
<td>Maldives</td>
<td>08:30 – 12:50</td>
<td>09:00 – 13:20</td>
</tr>
<tr>
<td>Myanmar</td>
<td>10:00 – 14:20</td>
<td>09:00 – 13:20</td>
</tr>
<tr>
<td>Nepal</td>
<td>09:15 – 13:35</td>
<td>09:00 – 13:20</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>09:00 – 13:20</td>
<td>09:00 – 13:20</td>
</tr>
<tr>
<td>Thailand</td>
<td>10:30 – 14:50</td>
<td>09:00 – 13:20</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>12:30 – 16:50</td>
<td>09:00 – 13:20</td>
</tr>
</tbody>
</table>
Annex E: Evaluation Form – Exercise Saphire 2023

NOTE: The first section may be discussed during the hot wash debrief using the Slido. We are very grateful if you could complete the evaluation form and send the completed form via e-mail to SEAROCController@who.int after the exercise (by 31 March 2023). Your feedback and suggestions will help us improve future exercises. Thank you for your cooperation!

Name of your country: ______________________

Questions to be discussed during the hot wash:

1. How many people participated in the exercise Saphire in your country today? ______

2. Did the exercise meet your expectations?
   - Fully
   - Partially (please briefly explain why)
   - Not at all (please briefly explain why)

3. Did the exercise achieve the stated objectives?
   - Fully
   - Partially (please briefly explain why)
   - Not at all (please briefly explain why)

Remaining questions:

4. About the exercise:
   a. Length
      - Too short
      - Suitable
      - Too long
   b. Pace
      - Too few injects
      - Suitable
      - Too many injects
   c. Difficulty
      - Too easy
      - Suitable
      - Too difficult
   d. Scope
      - Too narrow
      - Suitable
      - Too broad
   e. Injects
      - Unrealistic
      - Suitable for the exercise
      - Too complicated

5. Did you find the exercise useful in facilitating event-related communications?
   - Yes
   - No (please briefly explain why)

6. Did you experience any technical issues or difficulties (e.g. telephone, email, zoom connection, Slido) during the exercise?
   - No
   - Yes (please briefly explain the issues)
7. What are three (3) useful aspects that you have learned/observed from the exercise?
   1) 
   2) 
   3) 

8. What are three (3) issues would you suggest for WHO to improve future exercises?
   1) 
   2) 
   3) 

9. Please add any other comments:
Annex 3. Exercise scenario

The scenario was based on an outbreak of an unknown disease in goats in countries within the SE Asia Region.

Phase 1: Outbreak of unidentified disease in domestic goats (0 weeks)
Phase 2: Confirmation of a novel Nipah virus (NiVx), cases start to increase (3 weeks)
Phase 3: Domestic and international spread, convening of IHR Emergency Committee (6 weeks)
Phase 4: Declaration of a PHEIC (10 weeks: 7 weeks since confirmation of novel virus in week 3)

Phase 1

(30 March 2023) In District A of your country there has been an outbreak of an unidentified disease in domestic goats. At this stage, it is unsure where the disease has come from, or the cause. The goats are showing signs of fever, vomiting and difficulty in breathing, followed by seizures, a generalized skin rash and death. Specimens have been taken for analysis by animal health authorities. The disease appears to be highly contagious and has a fatality rate in goats of approximately 60% based on current reports from local owners.

A potential culling of goats in the affected district will have an economic impact on those families that rely on goats for income and food. Local authorities are concerned about the situation, the source of the disease, and the potential for further spread, particularly to other animals and wildlife. The Ministry of Agriculture and animal health officials are assessing the situation.

- Inject 1: Media report of virus outbreak and interview with a goat owner of your country
- Inject 2: Email from chief veterinary officer to WOAH and IHR NFP giving details of the outbreak and spread in district A.

(5 April 2023) Media reports that undiagnosed encephalitis/brain swelling has been identified in goats involved in the outbreak. Several people connected to the outbreak in District A of your country have become hospitalized with symptoms including headaches, fever, cough and difficulty in breathing, leading to the rumour that the virus can infect humans. Initial testing indicates the samples are negative for known pathogens, such as influenza, SARS-CoV-2, dengue, malaria and typhoid, and bacterial meningitis. Samples have been sent to the national and regional public health reference laboratory. The culling of goats in affected areas has started but is not popular with local communities.

- Inject 3: Media report of people unwell in district A and the start of the culling of goats.
- Inject 4: Email from the director of the public health unit for three requests (contact the local public health unit of district A, contact the Department of Animal Health at the Ministry of Agriculture and deploy a rapid response team).
  - Response: Reply to the director of the public health unit, contact the Department of Animal Health at the Ministry of Agriculture and deploy a rapid response team.
- Inject 5: Request from the National Public Health Division to log into and share information from EIS and the WOAH information site (WAHIS).
  - Response: log into EIS and WAHIS send a screenshot of the top three events in each.
Phase 2

(13 April 2023) Nine people in the affected District A – six with links to domestic goats – have been admitted to hospital suffering from fever, rash, strong headache, drowsiness and encephalitis. Two have died. Samples are sent to a regional reference laboratory for further genomic sequencing.

The Director requests your team to use the IHR Annex 2 to assess, and advise if we need to notify WHO as per the Article 6.

- Inject 6: Email from the rapid response team (RRT) on the joint investigation findings.
- Inject 9: Email from the Director of the Public Health division requesting an assessment of the outbreak in district A using IHR Annex 2 and whether we need to notify WHO as per Article 6.

(19 April 2023) Report from the Regional reference laboratory confirms detection of new henipavirus that closely resembles Nipah virus in specimens taken from three hospitalized patients.

Media report on a novel Nipah virus and an increase in the number of people with the disease. Media reports on meeting of steering committee are below.

A national multisectoral steering committee, engaging at the ministerial level, was established. The first meeting was held, calling for multisectoral actions. National incident management team was also activated.

- Inject 7: Email from the Regional Reference Laboratory confirming the presence of a novel variant of Nipah virus.
- Inject 8: Media report of the current situation of the outbreak.

Phase 3

(11 May 2023) Case numbers are increasing, and cases have been detected in various parts of the country including in the capital city. An increasing number of cases cannot be epidemiologically linked to known cases. Community spread is confirmed.

There are 23 confirmed laboratory cases, with 123 probable cases that have been reported, with most of them currently hospitalized and isolated, and 96 deaths reported overall. The dead include 16 children.

- Inject 9: Sitrep of the situation sent by email.

(13 May 2023) A case of the novel Nipah virus (NiVx) has been reported by FreeLand, a country with a land border with your country. The case is a 38-year-old female with recent travel history to District A, in your country, from 22–27 April 2023. The case developed severe encephalitis symptoms along with a rash and fever on 30 April and was admitted to hospital on 3 May. The case was transferred to the intensive care unit on 5 May and is currently still receiving treatment. On 25 April a cerebrospinal sample was collected. The isolate was sent to the regional reference laboratory on 28 April for analysis. The laboratory identified the virus as a novel Nipah virus on 11 May 2023.
Inject 11: SEAR IHR duty officer requests EIS posting.
  - Response: Complete EIS posting

(16 May 2023) Increasing cases of the novel Nipah virus (NiVx) in your country, and the clinical picture is becoming clearer.
  - 510 cases, 383 deaths
  - More than 9000 close contacts identified
  - Public health measures being undertaken
Media report of a family cluster in FreeLand around index case, and two other countries in South-East Asia and in neighbouring WPRO and EMRO regions.
Animal health update includes spread to cats, bats, etc.; information from animal health.

Inject 12: Freeland IHR NFP informs of passengers arriving on a flight from the IHR NFP’s country with encephalitis, rash and fever.

Inject 13: Request from Freeland IHR NFP for epidemiological and case information.
  - Response: Respond to email with the provision of epidemiological information.

(17 May 2023) WHO will convene an IHR Emergency Committee to discuss the current outbreak and requests a summary report from your country in the form of an EIS statement by 12:15 (a reminder!).

Phase 4

(8 June 2023) WHO Director-General has declared the outbreak of novel Nipah virus (NiVx) as a public health emergency of international concern (PHEIC) due to spread across three WHO regions.
Press release from the pharmaceutical company regarding clinical trials for a potential vaccine for humans for the novel Nipah virus (NiVx).