

# **Acute public health events assessed by the Alert and Response Operations teams in the WHO Regional Offices for the Americas and Europe 2014 Report**

---

18 November 2015

---

## Contents

Executive Summary .....	3
Introduction.....	3
Event Detection .....	4
<i>Initial source of event information</i> .....	6
Event Designation .....	7
Information Dissemination .....	10
<i>Region of the Americas</i> .....	10
<i>European Region</i> .....	11
<i>Inter-regional collaboration during mass gathering events</i> .....	11
Conclusion and Discussion .....	13
References .....	15

---

## Executive Summary

As part of the World Health Organization's (WHO) role in global outbreak alert and response to public health events under the International Health Regulations (IHR), the WHO carries out the detection, verification, and assessment of acute public health events<sup>1</sup> of potential international concern in order to identify those that could spread internationally or could present a serious risk and require a coordinated international response. Information is consequently disseminated to State Parties for appropriate public health actions through a variety of channels, including: the secure WHO Event Information Site (EIS) for the National IHR Focal Points (NFPs)<sup>2</sup>, WHO Disease Outbreak News (DON)<sup>3</sup>, the Pan American Health Organization, WHO Regional Office for the Americas (PAHO/WHO) Epidemiological Alerts and Updates<sup>4</sup>, WHO Drug Alerts<sup>5</sup>, International Network of Food Safety Authorities (INFOSAN) community site<sup>6</sup>, and the WHO Weekly Epidemiological Record (WER)<sup>7</sup>. Although outbreak detection and verification has been carried out by the WHO since 1997, it has been intensified since the IHR (2005) entered into force in June in 2007.

This report summarizes acute public health events recorded in the WHO's secure Event Management System (EMS) between 2001 and 2014. These events constituted a public health risk to countries through the international spread of disease or that may have required a coordinated international response from the perspective of the WHO Regional Office for the Americas (the Pan American Health Organization, PAHO/WHO) and the WHO Regional Office for Europe. Further analysis of the 2014 figures is provided within this report. Results presented in this report are based on information obtained from the EMS as of 30 September 2015; previous and future reports may have different numbers due to updated or revised information received. This is the third joint report developed by these two Regions, the previous reports were in 2012 and 2013, and this is the first time that it is disseminated to NFPs.

## Introduction

To fulfil its mandate under the IHR (2005), WHO must rapidly and consistently identify and assess events of potential international public health concern. This process consists of: identifying events that may threaten international public health, assessing their risk, informing other Member States of events, and assisting affected Member States in their investigation and control.

Within the WHO, record of outbreak detection and verification activities is maintained in the EMS, an online tool used to support surveillance, verification, assessment, and response

---

<sup>1</sup> An acute public health event is defined as any event that represents immediate threat to human health and requires prompt action, i.e. implementation of control and/or mitigation measures to protect the health of the public. This term includes events that have not yet led to disease in humans but have the potential to cause disease through exposure of humans to infected or contaminated food, water, animals, manufactured products, environments, or as a result of direct or indirect consequences of natural events, conflicts or other disruptions of critical infrastructure.

<sup>2</sup> WHO Event Information Site for National IHR Focal Points: This site has been developed by WHO to facilitate secure communications with the IHR National Focal Points (NFP) as part of the implementation of the International Health Regulations (2005).

<sup>3</sup> WHO Disease Outbreak News (DON): <http://www.who.int/csr/don/en/>

<sup>4</sup> PAHO/WHO Epidemiological Alerts: <http://www.paho.org/epialerts>

<sup>5</sup> WHO Drug Alerts: <http://www.who.int/medicines/publications/drugalerts/en/>

<sup>6</sup> International Network of Food Safety Authorities (INFOSAN) community site: <https://extranet.who.int/infosan/>

<sup>7</sup> WHO Weekly Epidemiological Record (WER): <http://www.who.int/wer/en/>

operations to public health events. EMS is an internal WHO tool used by technical officers in the WHO Country, Regional, and Headquarter Offices.

The EMS is not an exhaustive database of all outbreaks worldwide. Rather, the goal is to support WHO in the identification, documentation, and management of acute public health events that may constitute a potential public health emergency of international concern to countries through the international spread of disease or that may require a coordinated international response. If two or more of the following risk criteria in the IHR decision instrument (Annex 2) are met, an event should be entered into the EMS, and the verification process should be initiated (i.e. request for information from the corresponding NFP<sup>8</sup>), if necessary:

- Serious public health impact
- Unusual or unexpected
- Significant risk of international spread
- Significant risk of international travel or trade restrictions

In addition, when one “case” of the following diseases<sup>9</sup> is notified to the WHO under the IHR (2005), the notification should be entered in the EMS.

- Human influenza caused by a new subtype
- Poliomyelitis due to wild type poliovirus
- Severe Acute Respiratory Syndrome (SARS)
- Smallpox

All rumors or reports of such events must be followed up and entered into EMS for record. In addition, some events were entered and updated in EMS for “information only” in instances where there was concern that a public health event could evolve, for example during mass gathering events like the Winter Olympic and Paralympic Games held in Sochi and the 2014 FIFA World Cup Brazil™.

## Event Detection

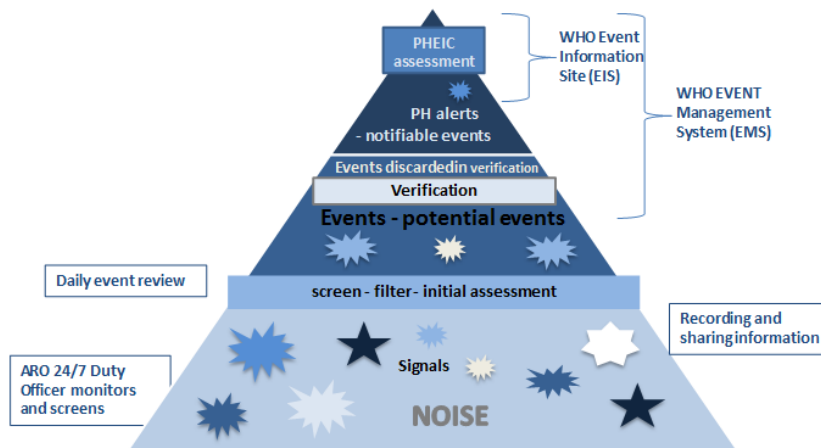
Since 2001, the WHO Regional Office for the Americas (PAHO/WHO, also referred to as AMRO) and the WHO Regional Office for Europe (EURO) have collected from global news media over 35,000 reports on public health signals<sup>10</sup> which equal approximately 2,500 reports per year and 50 reports per week. Of these reports, AMRO has followed up nearly 90 public health events per year that had or could have had international implications for the Americas region, and EURO has followed up on nearly 45 public health events per year. The media monitoring and public health event detection process is illustrated in Figure 1.

<sup>8</sup> The IHR NFP is designated by each State Party for notification and reporting to report all potential public health emergency of international concern to the Organization as per Article 4 of the IHR (2005).

<sup>9</sup> WHO Case definitions for the four diseases requiring notification in all circumstances under the IHR(2005): [http://www.who.int/ihr/Case\\_Definitions.pdf](http://www.who.int/ihr/Case_Definitions.pdf)

<sup>10</sup> **Signal:** data and/or information considered by the Early Warning and Response system as representing a potential acute risk to human health. Signals may consist of report of cases or deaths (individual or aggregated), potential exposure of human beings to biological, chemical or radiological and nuclear hazards, or occurrence of natural or man-made disasters. Signals can be detected through any potential source (health or non-health, informal or official) including the media. Identified signals must be verified. When it has been verified, a signal becomes an event.

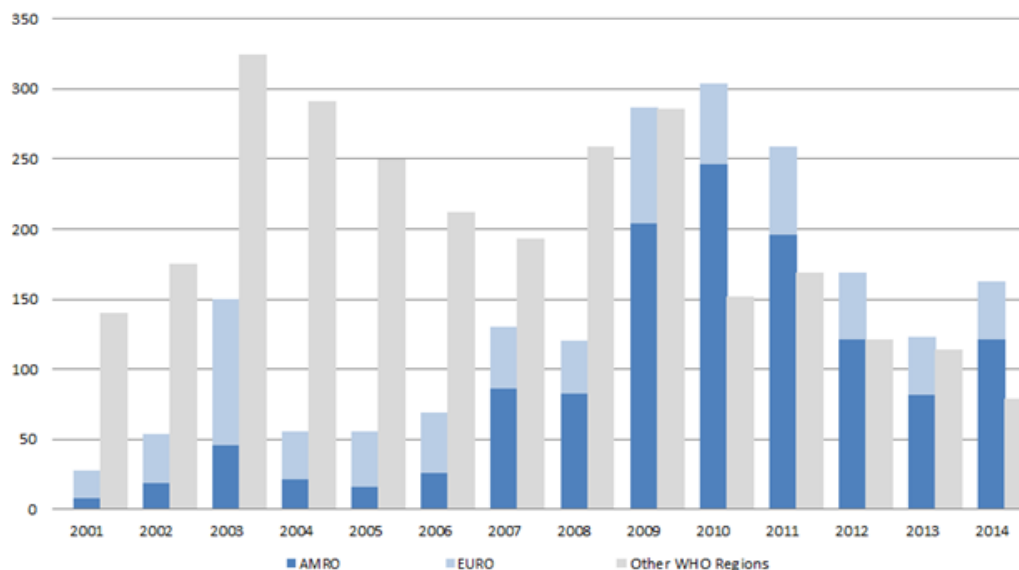
Figure 1. Media monitoring and public health event detection process.



Note: Alert and Response Operations (ARO); Public Health (PH); Public Health Emergency of International Concern (PHEIC)

In 2014 alone, a total of 242 public health events were detected and followed up by WHO. In general, events are entered into EMS by WHO Headquarters, Regional Offices, and Country Offices. Nevertheless, events in the Region of the Americas and in the European Region are entered only by the Regional Office. Of all events registered in EMS 67% (163) of those were registered among State Parties and territories in the Region of the Americas and in the European Region, with 50% (121) of the global total registered in 34 States Parties and 6 territories in the Region of the Americas and 17% (42) in the European Region (Figure 2). Since 2001, events registered in the EMS in both regions have comprised between 17 to 69 percent of the total global registered on an annual basis, with the highest proportion in 2010 and 2011. This was largely due events related to Influenza A(H1N1)pdm09 and cholera outbreak in Haiti in the Americas in 2010<sup>11</sup> and the *E. coli* O104:H4 outbreak in the European Region in 2011<sup>12</sup>.

Figure 2. Number of events (N=4,762) entered in the EMS by WHO Regional Offices, by year, 2001 – 2014.



<sup>11</sup> Epidemiological Alerts and Updates. Pan American Health Organization, 2010. Available at:

[http://www.paho.org/hq/index.php?option=com\\_content&view=article&id=10340&Itemid=41232&lang=en](http://www.paho.org/hq/index.php?option=com_content&view=article&id=10340&Itemid=41232&lang=en)

<sup>12</sup> Outbreaks of *E. coli* O104:H4 infection. World Health Organization. Regional Office for Europe. Available at:

<http://www.euro.who.int/en/health-topics/disease-prevention/food-safety/outbreaks-of-e-coli-o104h4-infection>

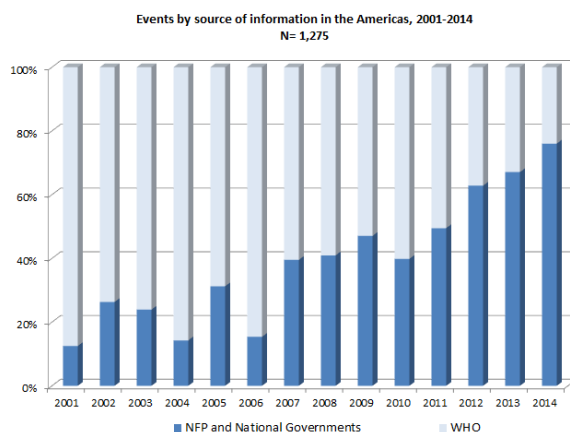
Comparatively, at a global level, the number of events registered by the Organization in the last three years was lower than in the preceding ten years. There had been an increase in the number of events between 2009 and 2011 partly based on several large scale and medium size events including the influenza pandemic A(H1N1)pdm09. However, the number of events registered since 2011 has been decreasing.

### Initial source of event information

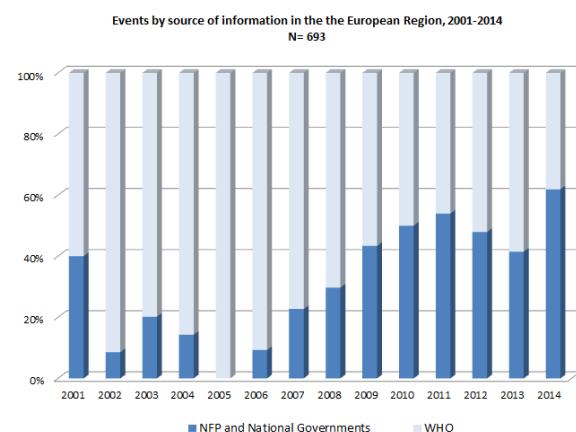
In the **Region of the Americas**, during 2014, the primary source of initial information occurred through reports received directly from the NFPs. Out of the 121 reports in the Region of the Americas, 76% (92) were notified by national health authorities, of which 91 were via the NFP. The remaining 24% (29) were detected through routine epidemic intelligence (including indicator based surveillance and event based surveillance), conducted at the Americas Regional and Country Office levels (Figure 3). After gathering information, 18 out of 29 unofficial reports were classified as potential international importance, and consequently, NFPs were contacted<sup>13</sup> for verification and to obtain further information. Responses to requests for verification were received within the 48 hours in only 4 of 18 requests sent to NFPs.

Similarly, in the **European Region** during 2014, NFPs have been the primary source of initial information with an upward trend since 2007. Out of 42 events, 62% (26) were reported by an NFP during 2014. The remaining 38% (16) were detected through routine epidemic intelligence (including indicator based surveillance and event based surveillance), conducted at the European Regional and Country Office levels (Figure 4). NFPs in the European Region were contacted for verification and completion of risk assessment in 33 events, and responses to requests for verification were received within 48 hours in 26 events.

**Figure 3.** Number of events (N=1,275) entered in the EMS, in Americas, by source of initial information, 2001-2014 by initial source of information - NFP and National Governments compared to initial information detected by WHO through other sources.



**Figure 4.** Number of events (N=693) entered in the EMS, in the European Region, by source of initial information, 2001-2014 by initial source of information - NFP and National Governments compared to initial information detected by WHO through other sources.



Overall, since 2007, the cumulative proportion of initial event information received directly through NFP reports has increased, both in the Americas Region and European Region as well as globally.

<sup>13</sup> As provided under Article 10 of the IHR (2005).

## Event Designation

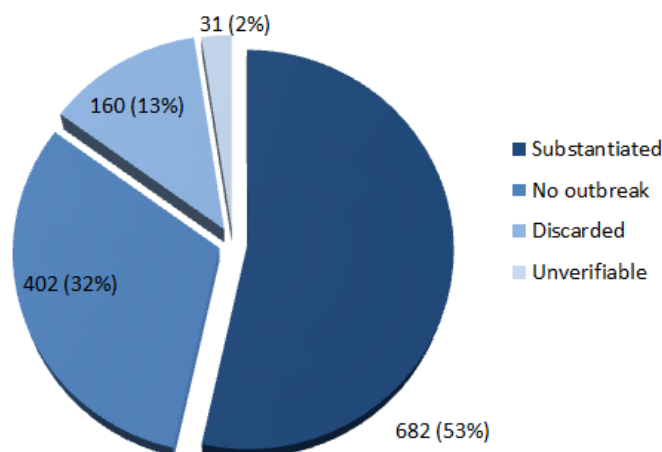
After an event is detected or notified by an NFP, the Alert and Response Operations team, in close collaboration with technical experts across the three levels of the Organization (Country Office, Regional Office and Headquarters), will conduct an initial event risk assessment. The risk assessment is a dynamic process that continues from the time the event is first detected by the WHO to the time the event is “closed.” The risk assessment is shared with NFPs, and when necessary, with the international community through existing mechanisms.

As more information becomes available, the event will be designated<sup>14</sup> as following:

- **Substantiated:** the confirmation of the presence of a hazard or increased number of human cases exceeds normal thresholds.
- **Discarded:** no international risk and no international risk expected, these events are closed accordingly.
- **No outbreak:** the number of human cases or hazard reported is within normal limits of occurrence.
- **Unverifiable:** when no information is forthcoming from the NFP/responsible national authority to substantiate its occurrence, despite the best efforts to obtain such information, and no information is received.

Between 2001 and 2014, one quarter (1,275 of 4,762) of events assessed globally occurred in the **Region of the Americas**. Of those, 53% (682) were designated substantiated, 32% (402) no-outbreak, 13% (160) discarded, and 2% (31) unverifiable (Figure 5).

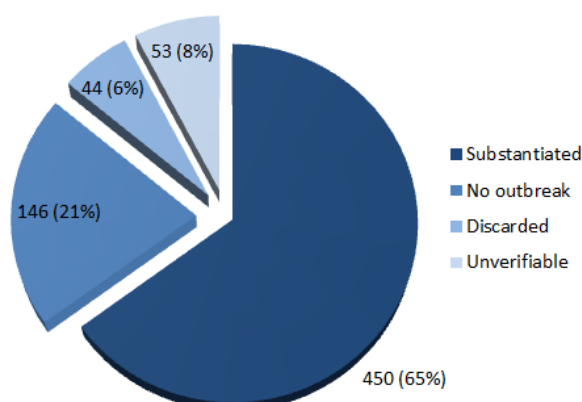
**Figure 5.** Distribution of events (N= 1,275) in the Americas by final designation, 2001 – 2014.



Between 2001 and 2014, 693 (15%) of the 4,762 events assessed globally were in the **European Region**. Of those, 65% (450) were designated substantiated, 21% (146) no outbreak, 6% (44) discarded, and 8 % (53) unverifiable (Figure 6).

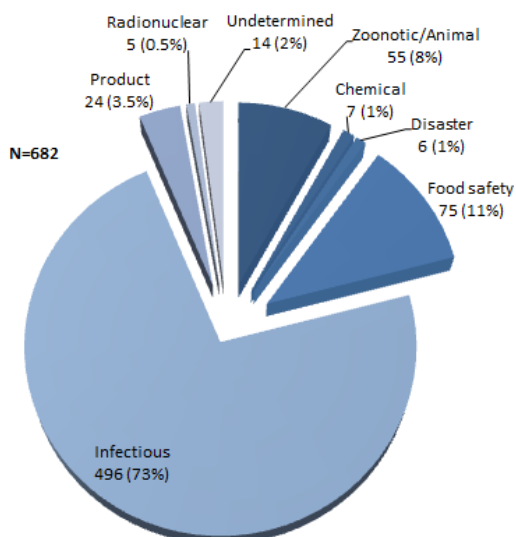
<sup>14</sup> Designation: reflects a judgment on whether an event qualifies as a concern and whether information about it can be substantiated.

**Figure 6.** Distribution of events (N= 693) in the European Region by final designation, 2001 – 2014.

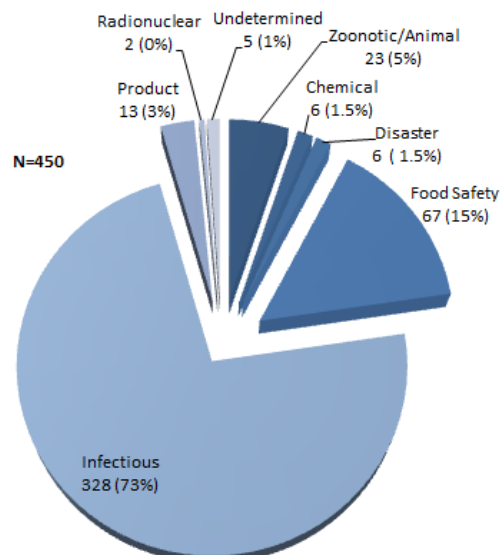


Since 2001 through 2014, there were 682 substantiated events in the **Region of the Americas**, which have been classified accordingly: 73% (496) due to infectious diseases, 11% (75) related to food safety, 8% (55) zoonotic/animal, 3.5% (24) product related, 2% (14) undetermined, 0.5% (5) radionuclear, 1% (7) chemical, and 1% (6) disaster (Figure 7). The **European Region** had 450 substantiated events in the same period, with 73% (328) due to infectious diseases, 15% (67) food safety, 5% (23) zoonotic/animal, 3% (13) product, 1.5% (6) chemical, 1% (5) undetermined, 0% (2) radio nuclear, and 1.5% (6) disaster related (Figure 8).

**Figure 7.** Distribution of substantiated events (N=682) by hazard in the Americas, 2001 – 2014.



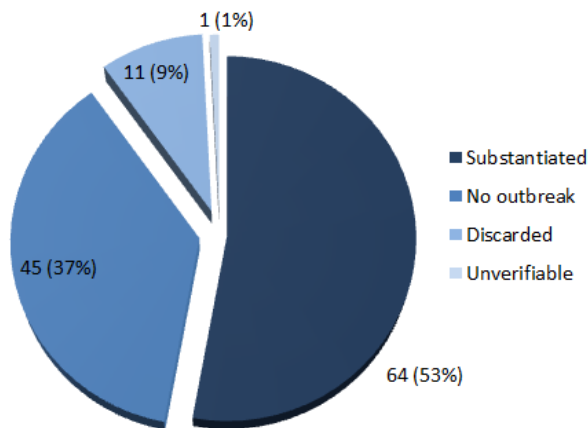
**Figure 8.** Distribution of substantiated events (N=450) by hazard in the European Region, 2001 – 2014.



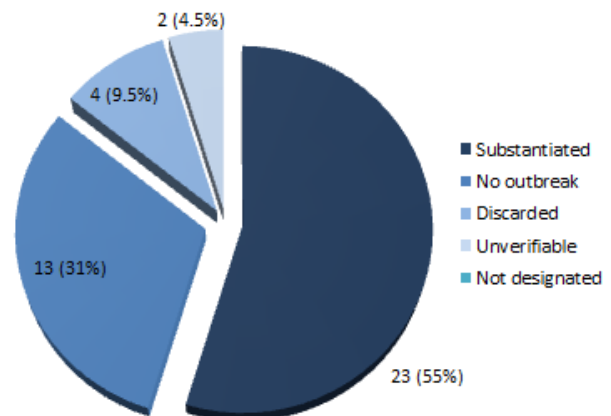
With regard to 2014, 121 (50%) of the 242 global events occurred in the **Region of the Americas**. Of those, 53% (64) were designated substantiated, 37% (45) no-outbreak, 9% (11) discarded, and 1% (1) unverifiable (Figure 9). During the same year, 42 (17%) of the 242 global events occurred in the **European Region**. Of those, 55% (23) were designated substantiated, 31% (13) no-outbreak, 9.5% (4) discarded, and 4.5% (2) unverifiable (Figure 10).



**Figure 9.** Distribution of events (N= 121) in the Region of Americas by final designation, 1 January – 31 December 2014.



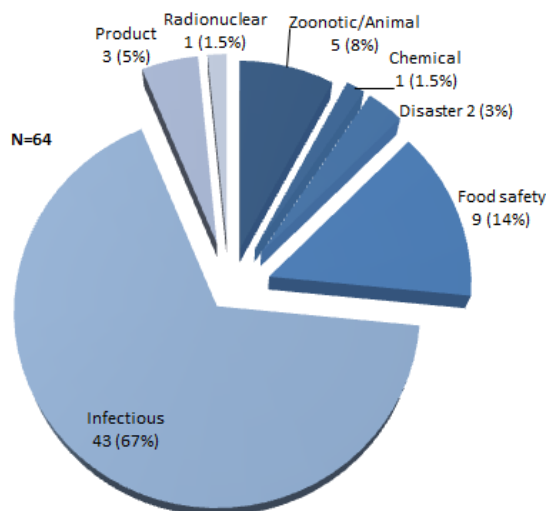
**Figure 10.** Distribution of events (N=42) in the European Region by final designation, 1 January – 31 December 2014.



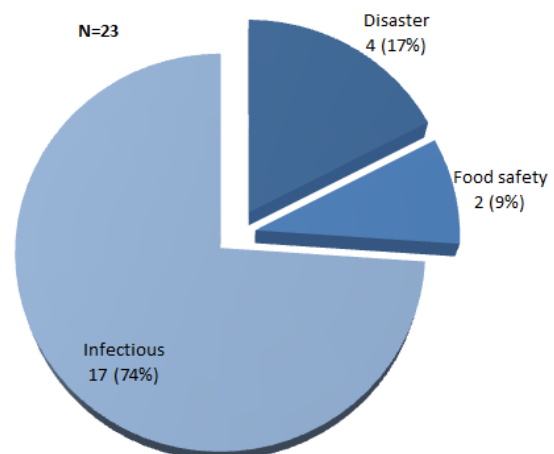
In the **Region of the Americas**, in 2014, 64 substantiated events were registered in 24 State Parties and 5 territories; 67% (43) were due to infectious diseases, followed by 14% (9) food safety, 8% (5) zoonotic/animal, 5% (3) contaminated products, 3% (2) disaster, 1.5% (1) radionuclear, and 1.5% (1) chemical (Figure 11).

In the **European Region** a total of 23 events were classified substantiated events and occurred in 19 States Parties; 74% (17) were due to infectious diseases, followed by 17% (4) disaster, and 9% (2) food safety (Figure 12).

**Figure 11.** Distribution of substantiated events (N=64) by hazard in the Region of Americas, 1 January – 31 December 2014.



**Figure 12.** Distribution of substantiated events (N=23) by hazard in the European Region, 1 January – 31 December 2014.



## Information Dissemination

### *Region of the Americas*

Examples of events registered in the **Region of the Americas** during 2014 include, in no particular order, the spread of Chikungunya virus in Central and South America, West Nile virus in Brazil, measles in Brazil, and the imported case and local transmission of Ebola virus disease in the United States. Requests for technical support to the Organization were triggered by several of the aforementioned Member States.

PAHO/WHO shared information concerning new, on-going, and updated acute public health events with Member States of the Americas Region in 2014 through the publication of 20 Epidemiological Alerts and Updates<sup>15</sup>, 31 EIS bulletin postings<sup>16</sup> of new or updated events which occurred or were related to the Americas, the dissemination of 206 DON postings (10 of which occurred or were related directly to events in the Americas)<sup>17</sup>, and 9 reports<sup>18</sup> of events in the Americas shared directly with NFPs by email.

In 2014, the NFPs of the Americas Region utilized IHR channels of communication to exchange public health information concerning 199 events; these are communication exchanges between NFPs regarding public health information that are not recorded in the EMS nor are they disseminated through the EIS. Of the 199, 126 were in accordance with IHR Article 30<sup>19</sup> (15 events) and Article 44<sup>20</sup> (111 events). The remaining instances were events requiring international contact tracing<sup>21</sup>, events that triggered a request for further information by another State Party or territory than the one directly concerned<sup>22</sup>, and requests for assistance<sup>23</sup>.

From the 126 events related to Articles 30 and 44 of the IHR, 89% (112) of the communications carried out consisted of direct communications between NFPs and 11% (14) were indirect communication using the WHO IHR Regional Contact Points as liaisons to contact another NFP. Of the 126 events, 39% (49) were communications directed to NFPs in other Regions with the majority of those, 45% (22) directed to NFPs in the European Region, and 24% (12) to NFPs in the Western Pacific Region.

The remaining 73 communications not related to IHR Articles 30 or 44, included 52% (38) indirect communications – using the WHO IHR Regional Contact Point as intermediary, and 48% (35) were direct communications between NFP to NFP.

---

<sup>15</sup> PAHO/WHO Epidemiological Alerts and Updates: [www.paho.org/epialerts](http://www.paho.org/epialerts)

<sup>16</sup> WHO Event Information Site (EIS) for IHR National Focal Points: This site has been developed by WHO to facilitate secure communications with the IHR National Focal Points (NFP) as part of the implementation of the International Health Regulations (2005).

<sup>17</sup> WHO Disease Outbreak News (DON): <http://www.who.int/csr/don/en/>

<sup>18</sup> Reports are those shared through communications sent directly to the IHR NFPs.

<sup>19</sup> IHR Article 30, *Travellers under public health observation*: Subject to Article 43 or as authorized in applicable international agreements, a suspect traveller who on arrival is placed under public health observation may continue an international voyage, if the traveller does not pose an imminent public health risk and the State Party informs the competent authority of the point of entry at destination, if known, of the traveller's expected arrival. On arrival, the traveller shall report to that authority.

<sup>20</sup> IHR Article 44 *Collaboration and Assistance*: States Parties shall undertake to collaborate with each other, to the extent possible, in: (a) the detection and assessment of, and response to, events as provided under these Regulations.

<sup>21</sup> An example would be where one IHR NFP informs another IHR NFP of persons who are believed to have been exposed to a contagious agent and for whom contact tracing should be initiated.

<sup>22</sup> An example is when the IHR NFP of Country B requests further information about a contaminated product reported in Country A (whether reports are official or unofficial); generally the requests are prompted by Country B to determine if there is a risk as they may be geographically close to Country A or have existing distribution channels, etc.

<sup>23</sup> Requests are made for assistance with shipment of samples or technical expertise to conduct the risk assessment, etc., related to a public health event that is notifiable under the IHR.

## *European Region*

All signals and events in the **European Region** were followed up by the Alert and Response Operations Programme in the Regional Office in close collaboration with national authorities and WHO Country Offices. Technical advice was provided and complemented by the technical units in the Division of Communicable Diseases, Health Security and Environment, and the Alert and Response Operations Team in WHO Headquarters.

EIS postings, the DON<sup>24</sup> site, WHO Drug Alerts<sup>25</sup>, and respective WHO Regional Office web pages were utilized to alert and inform the international community about new, on-going, and updated public health events. In 2014, there were 20 EIS bulletin postings of new or updated events and 9 DON publications on events which occurred in or were related to the European Region.

## *Inter-regional collaboration during mass gathering events*

The WHO defines a “mass gathering” event (MG) as a planned or spontaneous event where the number of people attending is sufficient to strain the planning and response resources of the community, state, or nation hosting the event.<sup>26</sup> Mass gathering generally refers to major international public events, such as sporting events or religious gatherings, as well as unplanned events with large number of attendees, which can put a strain on the planning and response resources of the hosting community. The increased risk of public health events during MGs poses a special challenge for the hosting authorities in terms of public health preparedness, response, and communication.

During 2014, the Americas and the European Regions hosted the 2014 XXII Olympic Winter Games and Paralympic Games both in Sochi, Russian Federation, and the 2014 FIFA World Cup Brazil™.

As part of the collaborative activities between the two WHO regions, enhanced event based surveillance activity was implemented during these MGs. On a daily basis open source articles were reviewed, and those with potential impact or relevance to the MG were initially assessed and summarized by the event specific review team at WHO Headquarters, WHO Regional Office for Europe, and WHO Regional Office for Americas.

## **2014 Winter Olympics and Paralympic Games, Sochi, Russia**

The Winter Olympics and Paralympic Games were held in Sochi, Russia, between 7-23 February 2014 and 7-16 March 2014, respectively. A team composed of WHO staff based in Headquarters, in the Regional Office for Europe, and in the Regional Office for the Americas carried out enhanced event based surveillance of acute public health events with potential impact on, or from, the Olympic and Paralympic Games.

The team completed daily media monitoring using the WHO Hazard Detection, Risk Assessment System (HDRAS). The specific search algorithm was designed in close collaboration with technical experts at WHO from different areas (e.g., vaccine preventable illness, food safety, preparedness, and response), experts from the European Centre for Disease Prevention and

<sup>24</sup> WHO Disease Outbreak News (DON): <http://www.who.int/csr/don/en/index.html>

<sup>25</sup> WHO Drug Alerts: <http://www.who.int/medicines/publications/drugalerts/en/>

<sup>26</sup> WHO Mass gatherings: [http://www.who.int/ihr/ith\\_and\\_mass\\_gatherings/mass\\_gatherings/en/](http://www.who.int/ihr/ith_and_mass_gatherings/mass_gatherings/en/)

Control (ECDC) and experts from GPHIN. HDRAS screened national official and unofficial open source data feeds and curated global health information sources (e.g., Global Public Health Intelligence Network (GPHIN), ProMED®, HealthMap®, the Hungarian National Association of Radio Distress-Signalling and Infocommunications (RSOE), etc.) by using keywords regarding the event, location, and mass gathering hazards such as chemical, biological, and radionuclear (CBRN) threats, or deliberate release of CBRN hazards.

Over a nine week period, a total of 26 reports were prepared; at first, daily during the main Olympics events, followed by weekly reports during inter-games period until three weeks after the end of the Paralympics. In total, 1,253 articles were screened, 76 alerts were assessed, and no public health events with potential impact on, or from, the Olympic Games were detected. Alerts for Middle East respiratory syndrome coronavirus (MERS-CoV), Influenza A(H7N9), Seasonal Influenza, and terrorist threats were updated throughout this period.

### 2014 FIFA World Cup Brazil™

The 2014 FIFA World Cup Brazil™ occurred between 12 June 2014 and 13 July 2014 in 12 host cities of Brazil. Accordingly, between 5 June 2014 and 25 July 2014, PAHO/WHO implemented enhanced surveillance<sup>27</sup> and activated enhanced information sharing mechanisms<sup>28</sup> aimed to detect, verify, and respond to events in Brazil impacting the 2014 FIFA World Cup Brazil™ as well as global/regional health and events outside of Brazil.

The methodology applied during the World Cup for enhanced surveillance and early detection of events consisted of utilizing the existing routine methodology for event surveillance and official reporting procedures. This was done in addition to enhanced credibility and relevance screening filters with added terminology related to the 2014 FIFA World Cup Brazil™ during epidemic intelligence activities, as well as the additional epidemic intelligence support received from GPHIN, the Colombia NFP, the Mexico NFP, the United States NFP, and the Peru NFP. This methodology consisted of the following four distinct procedural steps:

1. Screening of public health information potentially relevant to the World Cup through GPHIN.
2. Filtering screened information for potential public health events.
3. Verification and analysis of potential public health events.
4. Communicating the epidemic intelligence findings.

Regarding communicating the findings, a Public Health Daily Intelligence Report was produced Monday through Friday, beginning on 5 June through 25 July 2014. The Daily Reports were posted on a secured collaboration site. Confirmation that the Daily Report was updated was sent daily to those with access. Access to the site was provided directly to all NFPs of the 35 Member States in the Americas Region and corresponding PAHO/WHO personnel. In addition, the PAHO/WHO Public Health Daily Intelligence Report was disseminated via the EIS through the

<sup>27</sup> Enhanced surveillance consisted of expanding the information sources, including additional keywords and conducting the epidemic intelligence activity in a systematic and consistent manner following the routine Alert and Response Standard Operation Procedures. Epidemic intelligence activities were supported by the Global Public Health Intelligence Network (GPHIN), the Colombia NFP, the Mexico NFP, the US NFP and the Peru NFP. Periodically reports were also received from the Brazil NFP and additional NFPs: Argentina NFP, Chile NFP, and the Guatemala NFP.

<sup>28</sup> Enhanced information sharing mechanism consisted of sharing—through the PAHO/WHO Public Health Daily Intelligence Report—a synopsis of all official and unofficial communications received from Member States during this period within 24 hours of first information received.

announcements section (PDF format uploaded), ensuring access to the report by all Member States.

In total, there were 28 Daily Reports on events relevant to the mass gathering that were shared through the EIS and the collaboration site; this included events and unofficial reports not registered in the EMS. Archives of the Daily Reports continue to be available through the EIS.

## Conclusion and Discussion

WHO has utilized a mechanism for outbreak verification since 1997. Since the IHR (2005) entered into force in June in 2007, this mechanism has been utilized in close collaboration with the WHO Headquarters, WHO Regional Offices, and the Member States through their NFPs. Actions, decisions, and risk assessments related to this mechanism have been recorded in the EMS.

This report summarizes events recorded in the EMS from 2001 to 2014 for the Americas and European Region, with a focus on 2014 data. During the overall period (2001 to 2014), between 17-69 percent of the total annual global registered events were reported from the Americas and European Regions. The highest number of contributions from both Regions occurred in 2009, 2010, and 2011.

At the global level, particularly in the Americas and European Regions, participation of the NFPs as the first source of information of public health events with potential international impact has increased over the years. During 2014, more than 50% of assessed events were classified as substantiated, most of them classified as infectious diseases. The event verification process was applied for 18 events in the Americas Region and 33 events in the European Region. However, compliance with Article 10 of the IHR, concerning timeliness in responding to requests for verification (provision of information allowing an informed risk assessment) was very low (22%) in the Americas Region. Delays in responses to requests for verification should be carefully analysed in context of establishment and maintenance of the IHR core capacities. In addition, the absence of responses to event verifications should be reviewed in context of regional and national capacity building.

Information on new, on-going, and updated events was communicated to the international community, and advice to States Parties was provided through a large number of public health event reports shared with Member States in 2014; most related to the Ebola virus disease (EVD). In total, the Americas and European WHO Regions have contributed to the publication of information on 51 bulletin publications in the EIS, 18 DON publications<sup>29</sup>, and 9 reports<sup>30</sup>. The number of reports shared with Member States using the NFP channel in the last five years has been high. Consequently, there remains a need for further feedback from Member States regarding the use of the information received from the Organization for the decision making at country levels to prevent and prepare for public health risks.

Inter-regional collaboration has been strengthened during mass gathering events in 2014 such as the Winter Olympics and Paralympic Games in Sochi, Russia and the FIFA World Cup Brazil™. Global public health emergencies (e.g., Ebola virus disease outbreak in West Africa, the

<sup>29</sup> One of the DON publications referred to events in the Americas and European Region, available at: [http://www.who.int/entity/csr/don/2014\\_05\\_15\\_mers/en/index.html](http://www.who.int/entity/csr/don/2014_05_15_mers/en/index.html)

<sup>30</sup> This number is based on events, and does not include announcement like the 2014 FIFA World Cup Brazil™ report.

International Spread of Wild Poliovirus and the MERS-CoV outbreak may have a direct impact on the availability and redirection of resources at the country, regional, and global levels. The existing collaboration between WHO Regional Offices for the Americas and Europe, other Regional Offices, WHO Headquarters, and all Member States is instrumental in enhancing early warning and response mechanisms (including event detection, verification and response), strengthening effective communications among Member States, and finally, insuring adequate and timely responses to public health emergencies.

---

## References

1. World Health Organization. Fifty-eighth World Health Assembly, Resolution WHA58.3: revision of the International Health Regulations (2005).
2. Rapid Risk assessment of acute public health events. World Health Organization; 2012 WHO/HSE/GAR/ARO/2012.1.
3. Early detection, assessment and response to acute public health events: Implementation of Early Warning and Response with focus on Event-Based Surveillance. Interim version. World Health Organization; 2014. WHO/HSE/GCR/LYO/2014.4.
4. National IHR focal point guide. Designation/establishment of National IHR focal points. Geneva (Switzerland): World Health Organization; 2006. Available from <http://www.who.int/ihr/English2.pdf> [accessed 3 November 2015].
5. WHO technical consultation on the implementation and evaluation of Annex 2 of the International Health Regulations (2005). Geneva (Switzerland): World Health Organization; 2008. (WHO/HSE/IHR/2009.10). Available at: [http://www.who.int/ihr/summary\\_report\\_annex2.pdf](http://www.who.int/ihr/summary_report_annex2.pdf) [accessed 3 November 2015].
6. Implementation of the International Health Regulations (2005): Report by the Director-General. Geneva (Switzerland): World Health Organization; 2013. Available at: [http://apps.who.int/gb/ebwha/pdf\\_files/WHA66/A66\\_16-en.pdf](http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_16-en.pdf) [accessed 3 November 2015].
7. Grein T, Kamara K-B, Rodier G, Plant A, Bovier P, Ryan M, Ohyama T, and Heymann D. Rumors of Disease in the Global Village: Outbreak Verification. Emerging Infectious Diseases. Vol. 6, No. 2, March–April 2000.
8. WHO event management for international public health security. Operational Procedures. Working Document. June 2008. WHO/HSE/EPR/ARO/2008.1 Available at: [http://www.who.int/csr/HSE\\_EPR\\_ARO\\_2008\\_1.pdf](http://www.who.int/csr/HSE_EPR_ARO_2008_1.pdf) [accessed 3 November 2015]