



share and move to face nasty bugs

# ASSET Pandemic Preparedness and Response Bulletin

## “Share and move”

Issue 1, April 2015



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[www.asset-scienceinsociety.eu](http://www.asset-scienceinsociety.eu)

ASSET Action plan on Science in Society related issues in Epidemics and Total pandemics





Highlighting strategic priorities and policy-related initiatives on Pandemic Preparedness and Response, the “*Share and Move*” ASSET Bulletin intends to be essential to a wide-ranged target: competent institutional actors and public health authorities, decision-makers, even on social networks.

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## Editorial

### WELCOME TO READERS

An enjoyable experience of reading. To know more and plan action better

**Contemporary societies are constantly facing new challenges** like achieving effective, equitable, sustainable and accessible health and social systems. In the field of communicable diseases, newly emerging infections address several crisis-related health issues ranging from effective preparedness and responses strategies to vaccine development.

**Beside changing innovations** in pharmaceuticals, vaccines and medical devices, key areas to be considered for action and research concern deterioration of public trust both in science and in public health. Failures in interventions, like inadequate levels of vaccination coverage leading to epidemics, are under scrutiny and patient engagement in health governance is an essential component of a health and wellbeing agenda. Ad-hoc approaches are usually adopted to deal with single issues, but they fail to reckon with bigger pictures and, overall holistic strategies and thus interdependency of variables are lacking.

**ASSET (Action plan on Science in Society related issues in Epidemics and Total pandemics)** is a four-year Mobilisation and Mutual Learning Action Plan (MMLAP), started in January 2014 aimed at forging a partnership with complementary perspectives, knowledge and experiences. Scientific and societal challenges raised by pandemics and associated crisis management will be addressed, with the aim of exploring and mapping Science in Society (SiS) related issues in global pandemics. The final goal is to define and test participatory and inclusive strategies, in order to identify the necessary resources to make the action sustainable after the project completion.

**The ASSET Pandemic Preparedness and Response Bulletin “Share and move”** is an updating tool on policy initiatives concerning pandemics and related crisis management, developed at local, national and international levels. This Bulletin - seven editions to be issued by December 2017 - deals with the latest key health data, information and indicators in matter of Public Health Emergency Preparedness (PHEP), Emergent Communicable Diseases, revisions of national pandemic plans and/or strategies, as well as of relevant statements and recommendations in the field.

**A matter of editorial choices** To better understand which columns are runned and the sort of contents that is selected, the “*What’s new from the world...*” formula has been adopted and implemented. News from the world of Pandemic Preparedness and Response are reported in a main section that can be seen as a folder “case” including core issues such as PHEP, risk communication, laws. Major achievements by the most important international public health institutions are described as well as highlights and insights circulated by the most used social media. The Bulletin shows also a relevant website in the field, news from the ASSET project and a “snapshot”, standing for an innovative concept represented by a graphic item.



## What's new from the world of Pandemic Preparedness and Response

### EU Decision 1082: a challenge to increase population protection! (Donato Greco)

#### When the gap intervenes in implementing policies

**The EU Member States response capacity to health threats** is still very uneven and inadequate to cope with cross border international health threats: two striking examples are the recent responses to the H1N1 flu pandemic and to the Ebola alert. Given that the IHR WHO regulations implementation is ongoing but still far from a full application in several countries, the European Parliament and the European Council agreed to approve [DECISION No 1082/2013 on 22 October 2013 on serious cross-border threats to health and repealing Decision No 2119/98/EC](#). The Commission shall submit a report on the implementation of this Decision to the European Parliament and the Council by 7 November 2015, and every three years thereafter.

A Health Security Committee (HSC), composed by Member States representatives, is hereby established as technical body: a former HSC was already existing and revealed to be instrumental in setting up this decision. Anyway, it stood for an "informal body" while the actual committee took well defined and wide ranged tasks in coordinating and supporting the European Commission.

The other innovative aspect of this directive is definitively the recognition of risk communication as one essential tool in coping with health threats (par. 22 of considerations). Countries are in fact requested to include appropriate risk communication strategies into the mandatory annual health response and preparedness plan. Moreover, at art. 11 par. b, coordination of risk and crisis communication at EU level, to be adapted to Member State needs and circumstances, aims at providing consistent and

**Public health measures in relation to several categories of serious cross-border threats to health** are recalled by this Decision making clear enough that its application field goes over simply the communicable diseases area, up to unknown origin then including man made attacks (art. 2, par. 1 and 2)

- ✓ threats of biological (communicable diseases, antimicrobial resistance and healthcare-associated infections related to communicable diseases, biotoxins or other harmful biological agents not related to communicable diseases) or chemical or environmental or unknown origin;
- ✓ events which may constitute public health emergencies of international concern under the IHR, provided that they fall under one of the categories of threats set out in points listed above;
- ✓ epidemiological surveillance of communicable diseases and of related special health issues.

coordinated information in the European Union to the public help the healthcare professionals. Put in practice de facto only on October 2014, this directive gives appropriate space for implementing products both from [TELLME](#) and [ASSET](#) 7FP projects: scientifically based risk communication strategies and appropriated tested tools for best effective communication, offer a relevant challenge to all national authorities, but also to the researchers engaged in working on ASSET project.



## What's new from the world of Pandemic Preparedness and Response

### Dangerous relationships (Mircea Ioan Popa)

#### How bad communication can destroy a well-planned vaccination programme

[World Health Organization \(WHO\)](#) website provides practical information on pandemics: current definitions, preparedness phases, confirmation methods. An **epidemic** is identified as “the occurrence of more disease cases than usual”, **influenza pandemic** is defined as “an epidemic expanding throughout the entire globe”. That is very easily accomplished today because of a highly interconnected world by travelling. Pandemics can be mild or severe in the disease and the number of deaths that they cause. Identifying the current pandemic phase is applied by certain criteria, such as the viral transmission modes, whether it is a reasserting virus or if outbreaks are reported in another country from the WHO Region.

*“Among crucial aspects of pandemic preparedness and response, risk communication plays a primary role. Whether information must always hold a base of evidence, communication has also to be timely and unambiguous, developed according to a participatory approach. In this perspective, expected decisions are scientifically grounded and reliable”.*

**Vaccination programs** must account safety and effectiveness issues, but should also manage side effects and deaths wrongly attributed to vaccine uptake (quite frequently circulating on the Internet or by media). To further outline the delicate and difficult relationship between communication and vaccination, two case histories are reported.

**HPV vaccination has raised many pros, but especially many opinions against immunization.** This was partially due both to lack of information and to poor communication.

During vaccination campaigns, several deaths were reported in young immunized girls. The most were erroneously related to HPV vaccination, without accounting comorbidities and the real cause of death. No scientific demonstration – but sustained reactions in the community, without a clear and useful explanation from health authorities (from case to case). An example showing to what extent lacking communication can let a vaccination program fail is the case of a 14-year-old girl who died shortly after being vaccinated against HPV. The news was published on “The Guardian”, suggesting a causal relationship between the events. Although two days later another article explaining the girl had a thorax tumour was issued, the first news definitively had a stronger influence on the readers.

**A good health risk communication, messages is ensured by evidence.** In November 2014, the flu vaccine Fluvad, commonly used in elderly with comorbidities, was accused to have killed three people in Italy. Some regional vaccination campaigns were stopped, several batches of vaccine were withdrawn. The story was picked up by newspapers – for instance, a syringe on a front page photo titling “Lethal injection” – pretty amplifying population fear for vaccination. Official reports by the Italian Drug Agency did not find any causal relationship between Fluvad vaccine uptake and the three deaths. Basing on 12 reports from six Regions, where six batches of flu vaccine (about 1.3 million doses) were used, 1,369 deaths per day were estimated in population aged over-65. Assuming a 10% use of Fluvad and 10% of deaths were reported, 13 deaths per day were estimated whereas only 12 cases were overall reported in 22 days, relatively few adverse reactions.

Article based on a [presentation](#) by Pier Luigi Lopalco (ECDC)



## What’s new from the world of Pandemic Preparedness and Response

### Assessment of human influenza pandemic scenarios in Europe

#### A literature review and parameters to define how severity profiles may develop

**The response to the emergence of the 2009 influenza A(H1N1) pandemic** was the result of a decade of pandemic planning, largely centred on the threat of an avian influenza A(H5N1) pandemic. Based on a literature review, this [study](#) aims at defining a set of new pandemic scenarios that could be used in case of a future influenza pandemic. A total of 338 documents were identified using a searching strategy based on seven combinations of keywords. Eighty-three of these documents provided useful information on the 13 virus-related and health-system-related parameters initially

considered for describing scenarios. Among these, four parameters were finally selected (clinical attack rate, case fatality rate, hospital admission rate, and intensive care admission rate) and four different levels of severity for each of them were set. The definition of the six most likely scenarios results from the combination of four different levels of severity of the four final parameters (256 possible scenarios). Although it has some limitations, this approach allows for more flexible scenarios and hence it is far from the classic scenarios structure used for pandemic plans until 2009.

## About Preparedness and Response to Communicable Diseases in the world

### From Eastern Europe

**Bulgaria** A pilot project titled “Attitude towards Vaccination: Different Points of View” is being developed by the [University of Sofia, Department of Sociology](#).

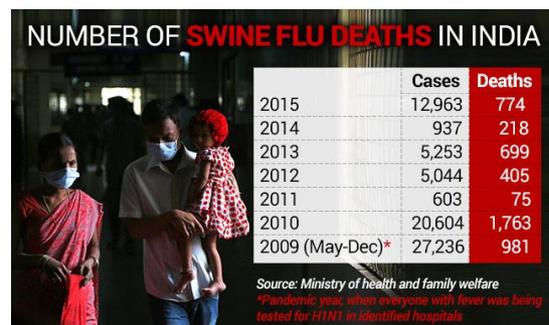
**Romania** Public health importance of influenza and related vaccination issue is the focus of an [article](#) by [Alexandrescu V.](#) in Infectio.ro. 2014;40(4):6-9.

### From America

**USA** The [measles outbreak](#) continuing to spread – with 146 cases confirmed in 7 states as from December 28<sup>th</sup> to March 27<sup>th</sup>, 2015 – stands not only as an epidemiological case study but also as a quite great communication example about vaccine-preventable diseases.

### From Asian continent

**India** The current [H1N1 outbreak](#) in the subcontinent has provoked almost 800 deaths and quite 13,000 contagiouses between January 1<sup>st</sup> and February 21<sup>st</sup>.



### From Australia

**Victoria State** The latest [health management plan for pandemic influenza](#) came out in Melbourne.

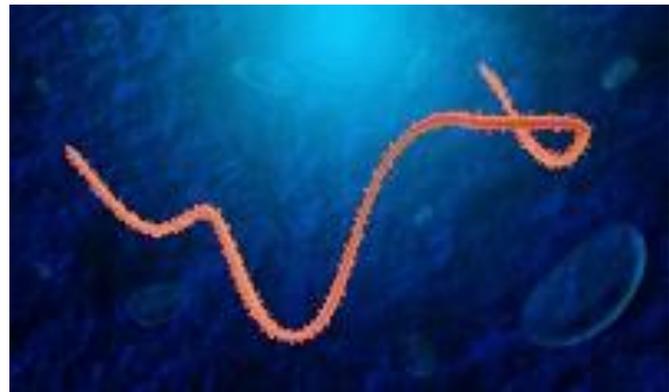


## What's new from the world of Public Health Institutions

### Ebola outbreak one year later: the WHO evaluation

#### In-depth analysis papers trace virus' spread and containment efforts

One year after the first [Ebola Virus Disease \(EVD\)](#) cases emerged in West Africa, the outbreak's continued deadly toll has led the World Health Organization (WHO) to explore the crisis in-depth in a series of papers that trace the virus' spread and WHO's response, the organization announced in a [statement](#). The [14 papers](#) and [interactive map](#) outline key events in the Ebola outbreak with special attention paid to hard-hit Guinea, Liberia and Sierra Leone. They also detail factors that led to successful containment in other African countries such as Senegal and Mali, and contrast these with the factors that caused traditional outbreak control measures to fail in other regions. The final paper, titled "What needs to happen in 2015," evaluates lessons learned from the past year to make recommendations for countries in their continuing efforts to bring the outbreak under control. If there is one thing Ebola specialists have learned since the start of the outbreak, however, is that predictions about the virus are maddeningly unreliable.



Still, the Liberian government is confident in its prediction that the West African country could be free of the virus by the end of February, with only 10 confirmed cases remaining as of January 12, Reuters [reported](#). Liberia was one of the hardest-hit countries, accounting for more than 3,500 of the total 8,400 killed, according to WHO. The worldwide community may be tempted to become complacent as the number of cases has started to decline, but must not rest until there are zero cases of Ebola. As well we must not rest until the health system in Liberia and in West Africa is strong enough to contain the next outbreak, whether it be of Ebola or some other threats.

## About Pandemic Preparedness and Response according to ECDC

### Pandemic Plans and Evaluations have not been updated recently in Europe

**Lessons learnt exercises** After the 2009 pandemic, many countries and international bodies have been undertaking evaluations or even formal enquiries to assess how well their plans and preparations worked against the particular features within pandemic evolution. ECDC is aware of at least 16 international/

multinational evaluations that are underway and are relevant to European countries. Influenza pandemic preparedness [plans](#) are available per country and a [table](#) lists known evaluations and published report (interim or final). Other tools are provided: [assessment charts](#), [ECD comments](#), [summaries](#).



## What's new from the world of Social Networks (Michele Bellone)

**Tapping into online sentiment and behaviour displayed on social networks**, along with epidemiological and biological analysis, is now a powerful tool to predict how the public responds during infectious disease outbreaks, further improving the efficacy of evidence-based communication strategies. As [highlighted by experts of the TELL ME project](#), being present on media – especially on social media – long before the emergence of a crisis is one very important way for health institutions and authorities to build trust, which in turn is a key element in any kind of communication, at any degree. By doing this, it would be possible to take advantage of quickness and immediacy held by social media in spreading information.

**In the Ebola case**, many people in the regions struck by the virus started using social media in order to share information about the disease and its prevention. Hashtags like [#EbolaFacts](#) became trending topics, and were also shared by local celebrities. The high utilisation of mobile phones in West Africa strengthens the effect of these campaigns, thus allowing to offer proper information about infection avoidance. However, the most rural areas in Guinea, Liberia, and Sierra Leone are not online, that means higher-risk people are also hard to reach.

**Data gathered through social networks** could play a significant role in keeping an incisive level of surveillance on communicable disease outbreaks. An outstanding example comes from the [work](#) of Patty Kostkova, Senior Research Fellow and Head of City e-health Research Centre (CeRC) at City University in London. In 2011, her team analysed three million tweets during the 2009 swine flu outbreak, looking for the word “flu”. They compared them with the

number of actual cases reported by the Royal College of General Practitioners (RCGP) – the professional membership body for family doctors in the UK – finding that the Twitter discussion, once cleaned the noise that is part of it, could actually predict the pandemic up to a week before the official surveillance. However, to properly communicate by social media, especially in case of epidemics or pandemics, it has to be minded that those features making them an extremely useful communication tool in case of emergencies represent a potential risk, too. Health organizations cannot control all information available on the web, whilst the way science works – with prudence, without drawing hasty conclusion and avoiding potentially dangerous oversimplification – can easily come into conflict with rapidity and shortness of many online messages. Few quick lines may not be able to display the complexity of situation involving many different factors, from scientific data to human behaviour, from cultural practices to political constraints.

**Spontaneous reactions by social media users** may counter the spread of misinformation online, even within hours, nevertheless, given the availability of proper information to fact-checkers. This is the conclusion of [a study](#) that used the riots occurred in Birmingham in August 2011, and the relative diffusion of misinformation on Twitter, as a model for the dynamics behind the spread of false rumours. When dealing with social networks in case of health emergencies such as epidemics or pandemics, knowing both sides of the coin is crucial for all actors involved in health risk communication and management. Health authorities and institutions should plan their online communication carefully and way before an outbreak starts, in order to really improve their communicative efforts and, as a consequence, their efficacy in saving lives.



## What's new from the world wide web in Pandemic Preparedness and Response

TELL ME Project **Transparent communication in Epidemics: Learning Lessons from experience, delivering effective Messages, providing Evidence**

Some products generated within the EU-funded project [TELL ME](#) (February 2012 - January 2015) are: a new Pandemic Integrated Threat Index, a Communication Model, a Practical Guide for Health Risk Communication, Primary Care Online Courses, a Social Simulation Model.



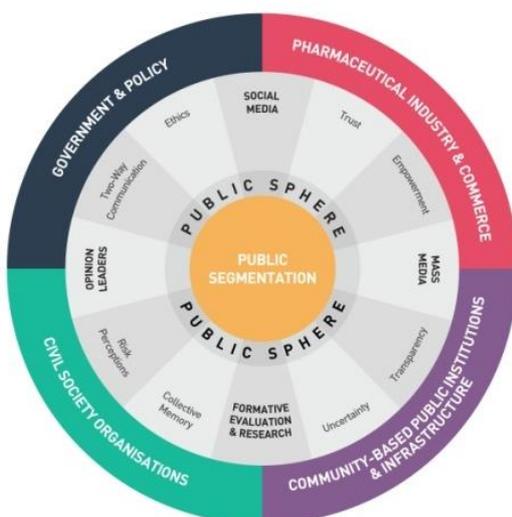
## What's new from the world of ASSET First year of ASSET project at a glance! Several activities have started and are ongoing, something is already out

Several issues can be highlighted from the workgroup on "[Study and Analysis](#)". About Pandemics and Epidemics, the following items have been outlined: governance; unsolved scientific questions; crisis participatory governance; ethics, law and rights; gender pattern; intentionally caused outbreaks.

In the field of "[Policy Watch](#)" the High Level Policy Forum has been activated ([a brief presentation](#)). The first [meeting](#) has been held in Brussels on March 2015, 12<sup>th</sup>. Within the "[Dialogue and Participation](#)" activities, a functional Glossary of terms for Capacity Building is about to be released.

## What's new... with a SnapShot!

## The graphic concept at the First PPRB Issue



Within the outputs developed by TELL ME project, the graphical representation of the new framework model for risk communication in case of pandemic shows that the Public Sphere, with all its segmentation, should be at the centre of the Outbreak Communication. The public, as all stakeholders as well, must be partners, not a target to aim at. Social actors include: civil society, politicians, institutions, private sector. Other key issues are: mass and social media, opinion leaders, formative evaluation. Additional elements intervene as well, such as two-way communication, ethics, empowerment, perceived risk, transparency, trust.



## Disclaimer

The ASSET project was designed to accomplish a European Commission Call (DG Research and Innovation - HEALTH), for developing a Mobilization and Mutual Learning Action Plan in response to epidemics and pandemics with regard to Science in Society related issues.

The European grant agreement ensures scientific and editorial freedom to the ASSET consortium partners.

The views expressed in the ASSET Pandemic Preparedness and Response Bulletin "*Share and move*" are those of the authors and may not necessarily comply with European policy.

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In case of conflict of interests, it is declared.

Readers are advised to verify any information they choose to rely on.

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