Risk communication in the context of Zika virus

Interim guidance

1 March 2016

WHO/ZIKV/RCCE/16.1

World Health Organization

1. Introduction

1.1 Background

This document provides interim guidance for effective risk communication around Zika virus transmission and potential complications. Although Zika virus was first identified in humans in 1952, few outbreaks have been documented. Recently, increased rates of neurological complications[1] including microcephaly and Guillain-Barré syndrome have been reported in the context of Zika virus outbreaks and increased circulation, particularly in the Americas.

A causal relationship between Zika virus infection and these potential complications has not yet been proven. In this uncertainty, effective communication strategies should be implemented to enable people to take the best informed decisions about protecting themselves, their families and communities.

This interim guidance should be used as a reference for communicators from a range of sectors to align with on-going Zika virus communication efforts. It complements a Zika virus risk communication and community engagement implementation guide developed by the WHO Regional Office for the Americas [1]. This guidance will be updated as new evidence, information and issues arise.

1.2 Target audience

This interim guidance is intended to be used by risk and health communication managers, staff and volunteers at global, regional or country level; communications professionals; anthropologists; sociologists; healthcare providers; hospital administrators; community leaders; programme managers; and policymakers.

2. Communicating risk

2.1 Scope of Zika virus risk communication

Risk communication is the real-time exchange of information, advice and opinions between experts, community leaders, or officials and the people who are at risk. The ultimate purpose is to enable everyone at risk to take informed decisions to act to protect themselves and others from infection and mitigate the effects of Zika virus and its potential complications.

[1] Information on these conditions is available at http://www.who.int/emergencies/zika-virus.

In the context of Zika virus, those at risk are people living in areas with transmission, as well as people who travel to those areas. At this stage, the following groups should be prioritized as both audiences and stakeholders:

a. Pregnant women, women of reproductive age and their partners in both affected and non-affected areas. Advice given should be contextualized based on location and legal, policy, cultural and religious contexts.

b. Community organizations such as religious groups, village groups, civil society organizations, businesses, and public and private institutions. These should be at the core of risk communication and engagement for Zika virus.

c. Schools (and school teachers in particular) in affected areas. These are key groups for providing information and advice on vector control and preventive behaviours to families.

d. Doctors, nurses and other health care workers in affected countries, who play a critical role in patient care and advice, surveillance, and care for babies with microcephaly. This group will be essential for implementation of new diagnostics, treatment and vaccines when they become available.

e. Health care workers in non-affected countries. This group will also require advice if they treat pregnant women from affected countries or provide advice and treatment to travellers. They can be mobilized both directly and through networks of professional associations.

f. Media in both affected and non-affected countries. Media are essential conduits of accurate information. If not effectively engaged, they may also be powerful sources of inaccurate or rumour-based information.

g. Local and international organizations involved in reproductive health/family planning services. These groups should be engaged to ensure that they prioritize Zika virus transmission prevention and identification and management of potential complications such as microcephaly in their work.

h. Local policymakers and other public figures. These individuals should be involved to spread awareness in their local communities about Zika virus, its potential impact, and preventative measures.

i. Travellers and the air, shipping and tourism industries. This sector should be engaged to discuss issues and advice on travel, passenger and cargo aircraft and ship

disinsection, and on vaccinations if they become available.

Risk communication for Zika virus should use five main strands: **public communication** via the use of media and social media communications for fast reach to large populations; **translational communication** by tailoring scientific information into language and formats that can be understood by non-experts and disseminating this through information, education and communication (IEC) materials; **stakeholder coordination** including policy communication and constituency relations to ensure consistency of messaging and broad reach to influencers able to engage at risk-communities; **community engagement** to empower those affected to participate in the design, implementation, and evaluation of the response and in protecting themselves as well as disseminating information; and **dynamic listening** to understand and respond to people's perceptions and management of misinformation and rumours.

2.2 Key Zika virus risk communication issues

Zika virus is transmitted by the *Aedes* mosquito, which also transmits dengue and chikungunya. There is currently no vaccine or curative treatment for Zika virus. The best way to protect people from Zika virus is to reduce their exposure to mosquito bites. **The key message at this stage is "Protect yourself from mosquito bites".** This includes active vector control (insecticides, destroying breeding sites), and practice of personal protection (wearing clothing covering as much of the body as possible, sleeping under mosquito nets, use of insect repellent).

While *Aedes* mosquitoes are the major source of transmission there have been documented cases indicating that Zika virus may be transmitted sexually. Consequently advice about safer sexual practices should also be given when discussing ways to prevent being infected by Zika virus. The technical information available at: http://www.who.int/csr/resources/publications/zika/en/ should be the basis of all Zika virus-related risk communication.

A second key issue is concern about the possible risk of fetal damage in pregnant women who have been infected by Zika virus. Human infection with Zika virus may be asymptomatic. Symptoms, when they occur, are usually mild and self-limiting, with the most common symptoms being fever, headache, skin rash, red eyes and joint pain. Thus pregnant women may not necessarily know whether they have been infected with Zika virus, but may be anxious about any effects on their unborn babies. The management of pregnancies in the context of Zika virus is a very delicate issue involving reproductive rights, and the need for adequate access to reproductive and family planning services.

A third key issue is that much of what people need to know is dependent on finding scientific evidence confirming or disproving the link between Zika virus and neurological abnormalities. Acknowledging uncertainty and the limits of scientific evidence are fundamental features of good risk communication. Communicating about uncertainty in a straightforward and honest way is essential for building and maintaining trust. At present there are many questions without definitive answers, including:

- Is Zika virus causing neurological complications such as microcephaly in babies and Guillain-Barré syndrome in adults?
- If a woman gets Zika virus during pregnancy, what is the risk of her baby being infected? What is the risk of her baby developing microcephaly?
- Who is most at risk of becoming infected with Zika virus? How big is the risk?
- Can Zika virus be transmitted through blood transfusions? Can it be easily transmitted through sexual contact? Can it be transmitted through breastmilk?
- Should women in Zika virus-affected countries postpone pregnancy? If so, for how long?
- Should pregnant women from non-affected countries travel to Zika virus-affected countries?

Intensive activities are underway to generate the science needed to provide advice to people and governments. However, it may be some time before we have strong evidence establishing whether or not there is a link between Zika virus and neurological disorders. When the science is uncertain, risk communication is even more important because it can keep lines of communication open through engagement.

2.3 General risk communication recommendations

The following recommendations reflect lessons learned during past epidemics and pandemics) such as SARS (2003), InfluenzaA (H1N1) (2009), MERS-CoV (2013), and Ebola (2014) [2] [3] [4]:

a. Establish and maintain a dialogue with key at risk communities and stakeholders. Listen to, acknowledge and address their concerns. Solicit their guidance in the design, implementation, and evaluation of key interventions. Ask for their help to disseminate information.

b. Be first, be fast and be frequent. Risk communication personnel must keep an ongoing line of communication with affected communities and key stakeholders even when, as with Zika virus, the facts are still evolving. Communication must be regular and reliable, updating information as it evolves and engaging affected populations and key stakeholders. People have a right to information especially when they may be at risk.

c. Create and maintain trust by being honest about what is known and not known. Be explicit about the uncertainty and explain what is being done to find out more. Provide available facts and regularly update these as the science evolves. Do not dismiss fears and

concerns, however irrational. Acknowledge and clarify rumours, myths and misconceptions and find ways to effectively address such misconceptions.

d. Communicate facts, figures and data with empathy and in language that is understandable by the intended audience. Anticipate new developments and prepare stakeholders for these. Coordinate with them for consistent objectives, strategies, messages and advice.

e. Recognize barriers to recommended behaviours. Provide resources, strategies, and support on how to address them. Use networks and partnerships to establish good listening mechanisms to identify and quickly address rumours, concerns and misinformation.

f. Spend time observing and learning directly from local people to understand and respect their cultures, beliefs and traditions. Integrate these findings into communication and engagement strategies and tactics.

g. Transform science and expert knowledge into contextualized communication that people can relate to, understand and trust. Use words, visuals and other aids that are culturally appropriate and in line with educational levels and preferences. This requires ability in knowledge transfer and translational communication.

h. Focus on engaging and empowering people, rather than simply informing them. Prioritize target groups and stakeholders and leverage social networks. Whenever possible, all communications should be discussed, agreed with and delivered by local community leaders and other stakeholders who are trusted within at-risk communities. This requires partnerships, operational capacity and credibility as a reliable and respected agency.

2.4 Changing focus as the situation evolves

Zika virus communication needs and interventions are expected to evolve with time as new knowledge and tools are generated. At present the link between Zika virus and potential neurological complications has not been conclusively established, so current communication interventions should focus on:

- Providing basic information about Zika virus, how to prevent infection, signs and symptoms, how and when to seek health care;
- Community engagement for vector control at the environmental, household and personal levels in areas with *Aedes* mosquitoes;
- Emphasizing the co-benefits of vector (mosquito) control for protecting against other diseases like dengue fever and chikungunya that are proven to be serious and sometimes deadly;
- Providing advice to high risk populations – women of reproductive age, pregnant women or women who plan to get pregnant in the near future – including advice on preventing potential sexual transmission;
- Providing advice for family members and other key stakeholders who have an influence on women's health and pregnancy-related decisions;
- Providing information to healthcare providers on clinical issues such as blood safety, managing pregnancy, diagnosing microcephaly and prevention of potential sexual transmission;
- Providing travel advice to the general public and information on disinsection to the travel industry;
- Managing rumours such as those linking microcephaly with vaccines and/or insecticides.

It is essential to anticipate how knowledge and concerns may evolve and to prepare stakeholders well in advance. New knowledge concerning the potential link between Zika virus and associated complications, possible modes of transmission and possible trials of diagnostics and vaccines will be available in the coming months. For all of this new knowledge it is important to:

- Engage with key partners in advance to prepare them and keep them informed about new information and data. This should be a two-way process: ask partners for help to disseminate new knowledge but also listen to the concerns and information coming from partners. Ensure consistency of advice across partner agencies.
- Build capacity to quickly transform new information into usable, culturally-appropriate and easily-understood risk communication resources that can be disseminated on multiple platforms. Offer the same information in different formats appropriate to social media, formal and informal networks.
- Educate key stakeholders and message multipliers such as journalists, television and radio broadcasters and influential social media personalities on the science and knowledge. This will decrease the likelihood and impact of inaccurate reporting and will engage them in the response.
- Use social science methods to assess stakeholder needs and beliefs and engage them in the design, implementation and evaluation of risk communication interventions. Methods include:
  - knowledge attitude and practice (KAP) surveys[2].
  - focus group discussions
  - community dialogue
  - interpersonal communication
  - consensus building processes
  - participatory mapping of influencers
  - human-centred design/participatory planning
  - key informant interviews
  - social media and traditional media monitoring

[2] WHO guidance and template surveys on vector control, pregnant mothers and health care workers in the context of Zika virus transmission are forthcoming.

- community radio conversations
- feedback from operational partners and stakeholders in the risk communication network[3]

3. Guidance development

3.1 Acknowledgements

This interim guidance was developed by the WHO Department of Pandemic and Epidemic Diseases (Gaya Gamhewage, Margaret Harris, Qiu Yi Khut, William Perea), Geneva with contributions from: the WHO Departments of Communication (Marsha Vanderford) and Global Capacities, Alert and Response (Aphaluck Bhatiasevi), Geneva; WHO Western Pacific Regional Office (Joy Rivaca Caminade, Angela Merianos); and WHO Emergency Communications Network (Nyka Alexander, Melinda Frost).

The following external experts reviewed the document and provided substantial input: Renata Schiavo Columbia University Mailman School of Public Health, New York; Joshua Greenberg, School of Journalism and Communication, Carleton University, Ottawa; Elisabeth Serlemitsos, Johns Hopkins Bloomberg School of Public Health Center for Communication Programs, Baltimore; Li Richun, Chinese Center for Disease Control and Prevention, Beijing; Keri Lubell, United States Centers for Disease Control and Prevention, Atlanta.

3.2 Guidance development methods

This guidance was developed using existing resources and guidance on best practice, as well as principles available at http://www.who.int/risk-communication/en/. The guidance was also informed by: a) literature reviews being conducted as part of a project to develop evidence-based WHO guidelines on emergency risk communication; b) reports on lessons learned from past epidemics and pandemics such as SARS (2003), Influenza A(H1N1) (2009), MERS-CoV (2013), Ebola (2014); and c) the 'Zika virus infection: step by step guide on Risk Communication and Community Engagement' by the WHO Regional Office for the Americas.

Members of the previously established WHO emergency risk communications guideline development group reviewed this document and recommendations were modified based on their feedback. The draft was then shared for comment with partners working in risk communication for Zika virus and comments received were taken into account when finalizing the guidance.

[3] For more information on how to join this network, email riskcommunication@who.int.

3.3 Declaration of interests

No conflicts of interest were identified for any of the contributors. No specific funds were used to develop this guidance.

3.4 Review date

These recommendations have been produced under emergency procedures and will remain valid until August 2016 or before depending on the evolution of the emergency. The Department of Pandemic and Epidemic Diseases at WHO headquarters in Geneva will be responsible for reviewing this guideline and updating it as appropriate.

4. References

1. World Health Organization Regional Office for the Americas. Zika virus infection: step by step guide on Risk Communications and Community Engagement. 2016. Available online at http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&Itemid=270&gid=33051&lang=en
2. World Health Organization. Outbreak communication guidelines. 2005. Available online at http://www.who.int/csr/resources/publications/WHO_CDS_2005_28/en/
3. World Health Organization. Outbreak Communication Planning Guide. 2008. Available online at http://www.who.int/ihr/publications/outbreak-communication-guide/en/
4. World Health Organization. Effective Media Communication during Public Health Emergencies. 2005. Available online at http://www.who.int/csr/resources/publications/WHO_CDS_2005_31/en/