

# Public Health and Emerging Disease Outbreaks: Why Talking to the Community is a Good Idea

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## Abstract:

The keys to combat infectious diseases are out there. Due to insufficient communication between key players, we still don't know how to compile all this important information. Many infectious diseases can be controlled, but poor public engagement, and the speed with which health care workers adopt new strategies severely inhibit our progress. As researchers, health care workers, public health agencies and others create more resources to aid in infection control, information dissemination and comprehension should be emphasized to enact real change.

## Main Article:

It's a tale as old as humanity. When we don't communicate well, we open the door to misunderstanding, presumption and nasty surprises. In the case of emerging infectious disease, failed infection control and poor case management can result.

Humans don't talk enough. We don't explain enough. We don't encourage scientific literacy and we don't check in with others to see if *they* think we're communicating well. To limit our exposure to disease risks, ranging from animals carrying zoonotic viruses to other infected humans, experts and the public need to work together.

The public's health is watched over by knowledgeable people from many different streams of expertise including laboratory workers, research scientists, epidemiologists, nurses, medical doctors and ambulance workers. These people are constantly putting out fires, many of which may have started and been quenched without us ever knowing they were burning.

But should the public know more about these fires and how they are fought? Is it ethical not to communicate known risks to the public and to healthcare workers worldwide? Risks associated with fire and flood, drought and storm are communicated each season. Parochial news stories frequently detail violence in our communities and a multitude of sporting outcomes. However, the nature of infectious disease outbreaks remain something of a black box to many, even though they happen all the time all over the world.

In particular, healthcare workers may benefit from knowing about newly found transmission risks or disease findings from a novel case under intensive care. Knowledge drives behavioural change that can save lives.[1] We live in a global community. Even if the lives saved are not citizens of our country, withholding information because it is unlikely to benefit our own countrymen, or even delaying dissemination of important information until it is published in a scientific journal is a poor choice. [2]

We provide two examples in which simpler, clearer and more open communication may have helped prevent many problems from occurring.

Firstly, confusion exists about how MERS-CoV infection of humans may result; is it from camels, or bats or humans? The key piece of information is that the majority of cases have and continue to be spread in hospital settings through close contact and contaminated surfaces.[4] Many cases could have been prevented if this information were better understood and acted upon, both by healthcare workers and the general public.

Secondly, in 2014 a nurse returned from Sierra Leone, developed ebola virus disease (EVD), and was nursed back to health by the expert team at the Royal Free Hospital in London. She was declared free of the Ebola virus. However, eight and a half months later she developed meningitis and she subsequently tested positive for Ebola virus. This secondary emergence phenomenon has never been reported before. We remain unsure of many details about the subsequent disease, including its origin, or whether other symptoms such as vomiting and diarrhoea occurred that resulted in the spread of contaminated fluids to other individuals. It could be that such details are important for revisiting some of the many chronically unwell convalescent EVD cases in West Africa. When and how the British team plan to communicate their findings, if at all, remains a mystery. In addition, the impact of the stigmatization of survivors must be both carefully considered and handled.

## Good Communication Requires Investments In Thought, Time And Money To Be Effective.

How we communicate is just as important as the communication itself. Good communication requires investments in thought, time and money to be effective. We should nurture a relationship of respect and trust with the public, ahead of any urgent need. With trust and ongoing communication, we may even be able to reduce the effort we now put into rebutting misinformation pedalled by uninformed talking heads. Teaching and communicating science is central to the public's understanding of every aspect of infectious disease and infection control. If the public understands why they are asked to vaccinate, for example they may be more likely to take part without the need for cajoling and argument.

Open access publishing, clear writing and down-to-earth language are more desirable for communication with the public compared to traditional public health documents or slow to publish, pay-walled, niche journals, written in dense and hard to understand science dialect.[5]

Hopefully those in public health and the fields of science and medicine will consider these issues as they work to establishing infection control measures. Good communicators and reliable communications are vital. Create a dialogue with the public now to build a partnership for later, to reduce distrust when an outbreak, epidemic or pandemic occurs. In this way, communities know which voices to trust and where to turn for their information. Leaving an information void invites others to fill it and more often than not, it is those who delight in titillation, invention, make-believe and fear-mongering.

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