

# The Role of Traditional Media in Vaccine Acceptance and Uptake

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## Building the capacity to improve vaccine acceptance and uptake

The Canadian Vaccination Evidence Resource and Exchange Centre (CANVax) is an online database of curated resources to support immunization program planning and promotional activities to improve vaccine acceptance and uptake in Canada. As an online resource centre, CANVax aims to increase access to evidence-based products, resources, and tools to inform public health professionals in immunization program planning and promotion.

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# Introduction

Despite the increasing impact of Internet and social media, traditional media continues to play an important role in framing public opinion regarding different topics, including health.<sup>1,2</sup> Newspapers are still a well-respected source of information: half of Canadian adults read newspaper content daily, and print media continues to be the primary source of information over online sources.<sup>3</sup> The amount of media attention on a topic shapes the public perception about the importance of that topic and emphasizes certain features of a debate.<sup>4</sup> While it is not intended to be health education material, the news media also influences public knowledge, attitudes and awareness of health issues.<sup>5</sup>

Research has shown that media coverage of controversial topics can raise the awareness of an issue, but it can also create public uncertainty.<sup>6,7</sup>

Media coverage of vaccination issues can affect parental vaccine decision-making and vaccine uptake. Unfortunately, media sources do not always provide balanced and complete information about vaccines.<sup>8-10</sup>

The first part of this report presents examples of recent media coverage about vaccination, describing how the controversies took place and what were the concerns raised by the media. Three cases are discussed: the controversies about the pertussis vaccine, the Measles-Mumps-Rubella (MMR) vaccine and the link with autism, and the HPV vaccine. Then, different tools are presented to help public health practitioners develop communications about vaccines.

## *Pertussis vaccine and the resurgence of the anti-vaccination movement*<sup>25</sup>

The pertussis vaccine controversy that started in the mid-1970s is often considered to be the match that lit the resurgent fire of active anti-vaccination opposition in modern days.<sup>11,12</sup> The controversy started in the United Kingdom (UK) after the publication of a report from the Great Ormond Street Hospital for Sick Children in London, alleging that 36 children suffered serious neurological conditions following the Diphtheria-Tetanus-Pertussis (DTP) immunization.<sup>13</sup> This report garnered much media attention and triggered waves of public concerns.<sup>14</sup> The Association of Parents of Vaccine Damaged Children was founded in the UK in 1974, and played a key role in drawing attention to this purported safety problem with the whole-cell pertussis vaccine.<sup>15</sup> By 1977, childhood pertussis vaccination coverage in the UK had declined from 77% to 33%. Three major epidemics of pertussis followed soon thereafter, with over 100,000 cases and the deaths of at least 36 children.<sup>11</sup> Despite reassurance about the vaccine's safety by the UK Joint Commission on Vaccination and Immunization, based on a large study that had looked at every child hospitalized in the UK with neurological diseases,<sup>16</sup> great opposition to the vaccine continued. Attempts to reassure the public continued, but by the mid-1980s the controversy had swept through most of Europe, Japan, the United States of America (USA), the Soviet Union and Australia.<sup>17</sup> In 1975 in Japan, after the deaths of two children who had just received Diphtheria-Pertussis-Tetanus (DPT) vaccine, the Ministry of Health and Welfare suspended the use of the whole-cell pertussis vaccine for infants. This was followed by major outbreaks of pertussis.<sup>18,19</sup> Angst about the safety of whole-cell pertussis vaccine spurred on the development of less reactogenic acellular pertussis vaccines.<sup>20-22</sup> In the USA, the anti-vaccine controversy began with the Emmy-winning 1982 documentary entitled 'DTP: Vaccination Roulette' that alleged the pertussis component was causing severe brain damage, seizures and mental retardation. As in the UK, concerned and angry parents formed victim advocacy groups, such as the National Vaccine Information Center, which is still active today.<sup>23</sup> Several lawsuits against vaccine manufacturers were instigated, resulting in increased vaccine prices and a drop in the number of companies producing vaccines.<sup>12</sup> In response, the US Congress, in 1988, passed the National Childhood Vaccine Injury bill to protect manufacturers from lawsuits by establishing and maintaining an accessible and efficient no-fault alternative program to the traditional tort system for individuals found to be injured by certain vaccines. The Vaccine Adverse Event Reporting System, a passive surveillance system where suspected side effects of vaccines could be reported by parents and health professionals, was also created by this Act.<sup>24</sup>

The MMR vaccine and autism controversy started with a study by the former Dr. Andrew Wakefield, published in *The Lancet* in 1998. In this study, Wakefield claimed that the MMR vaccine could cause autism.

This article was heavily reported by the British media, especially by the tabloids, giving rise to a public debate on vaccine safety.<sup>26</sup>

### **MMR controversy and the effect of balanced information <sup>25</sup>**

Andrew Wakefield is a former British surgeon who first attracted attention when he published a paper proposing a link between the measles virus and Crohn's disease in 1993<sup>27</sup> and two years later, in the prestigious medical journal *The Lancet*, between the measles vaccines and Crohn's disease.<sup>28</sup> Subsequent research failed to confirm these two hypotheses.<sup>29</sup> While he was still conducting research on Crohn's disease, Wakefield was approached by the parent of an autistic child, who was seeking help for bowel problems. Wakefield turned his attention to researching possible connections between the MMR vaccine and autism.<sup>30</sup> In 1998, Wakefield published, with 12 colleagues, a paper about 12 autistic children in *The Lancet*<sup>31</sup> (retracted). In this paper, the authors claimed that they had 'identified associated gastrointestinal disease and developmental regression in a group of previously normal children, which was generally associated in time with possible environmental triggers'<sup>31</sup> (retracted). At the time of his MMR research study, Wakefield was a senior lecturer and honorary consultant in experimental gastroenterology at the Royal Free Hospital School of Medicine. Although the paper stated that no causal connection had been proven, before it was published, Wakefield made statements at a press conference and in a video news release issued by the hospital, calling for a suspension of the triple MMR vaccine until more research could be done.<sup>32</sup> This was immediately controversial, leading to widespread publicity and a drop in vaccination rates in the UK. This was the beginning of the MMR vaccination scare that swept throughout the world.<sup>33</sup> Following Wakefield's claim, multiple epidemiological studies were undertaken; all found no link between MMR vaccination and autism.<sup>34-38</sup> In February 2004, after a four-month investigation, reporter Brian Deer wrote in *The Sunday Times* of London that, prior to submitting his paper to *The Lancet*, Wakefield had received £55,000 from legal firms seeking evidence to use against vaccine manufacturers, that several of the parents quoted as saying that MMR had damaged their children were also litigants, and that Wakefield had not informed colleagues or medical authorities of the conflict of interest.<sup>39</sup> In March 2004, immediately following the news of the conflict-of-interest allegations, 10 of Wakefield's 12 co-authors retracted.<sup>40</sup> In 2007, Wakefield and two of his co-authors were charged by the General Medical Council (GMC) – which is responsible for licensing doctors and supervising medical ethics in the UK – of serious professional misconduct. On January 28, 2010, the GMC panel delivered its decision on the facts of the case: Wakefield was found to have acted 'dishonestly and irresponsibly' and to have acted with 'callous disregard' for the children involved in his study, conducting unnecessary and invasive tests.<sup>41</sup> Wakefield lost the right to practise medicine in the UK. Soon afterward, *The Lancet* took the very uncommon step of retroactively retracting his article.<sup>42</sup>

Media have played a crucial role in conveying the MMR controversy. For Boyce, all the "ingredients" were there to create a controversy, especially the fact that news needs to be "newsworthy." For instance, the public disagreement between Professor Arie Zuckerman (the dean of the hospital's medical school) and Andrew Wakefield at the press conference served to fuel media interest in the story.<sup>43</sup> Boyce noted that, of over 285 stories published in UK media from February 1 to September 15, 2002, 40% included the word controversy/controversial at least once.<sup>43</sup>

This controversy was also led by an emphasis on vaccine risk rather than on disease risk: out of 262 stories, 59% presented risks from the MMR vaccine, whereas only 13% contained information on the risks of measles.<sup>43</sup> Some authors also suggest that this controversy may have been triggered by the journalistic norm of presenting "balanced" information. To fulfill this norm, some journalists try trying to present all viewpoints as equal. As Larson mentioned, "Media attempts to balance coverage by provision of equal opportunity to all viewpoints exacerbate the challenges to public

confidence in vaccines by allowing outlier views and small extremist opinions the same media space as views validated through a rigorous process of peer review by the scientific community.”<sup>44</sup> Boyce noted that, out of 285 stories around the MMR controversy, 48% presented balanced information (which means pro- and anti-MMR vaccine information), 32% presented anti-MMR vaccine information only, and 20% presented pro-MMR vaccine information only.<sup>43</sup> However, Boyce highlighted that balanced stories were actually weighted more heavily on the anti-MMR side.<sup>43</sup> This may explain why balanced information has been shown to increase parents’ uncertainty about vaccination.<sup>45</sup>

In contrast, the findings of a content analysis of traditional media coverage in Canada of the measles outbreak that occurred at Disneyland in 2015 showed that the coverage was largely positive toward vaccination.<sup>46</sup> Almost all articles used medical sources to reinforce their message, namely to encourage people to make sure their immunizations were up to date and to reinforce the importance of vaccination. Articles often included quotes from doctors, epidemiologists, experts, health ministers and so on in order to support their arguments.<sup>46</sup> They were making an evident effort to explain the symptoms of measles, how the disease can spread, and how it can be easily transmitted, to reinforce the importance of vaccination.

## HPV Vaccine Controversies

The human papillomavirus (HPV) was introduced in Canada in February 2007 and was recommended for females aged 9-26 years.<sup>47</sup> Several content analyses have been conducted on the traditional media coverage of HPV and HPV vaccine in the United States,<sup>6,48-52</sup> in Europe,<sup>2,53</sup> in Australia,<sup>54</sup> and in Canada.<sup>10,55-57</sup> Several themes were recurrent among all these studies and are presented in Table 1.

The terms used to qualify measles were "highly contagious illness," "most infectious disease" (repeated several times, including in headlines), "dreadful illnesses" or "devastating." On the other hand, vaccination was presented as the only way to prevent risk and contain the outbreak with sentences such as "The MMR vaccine reversed the death toll of measles in just a few years." It "has saved the lives of millions of people," it is the "right" to protect your children, it "has eliminated formerly common childhood diseases," and it is "incredibly safe." Vaccination was presented by the former federal health minister, Rona Ambrose, as a "medicine miracle"; the vaccine is "the best way to prevent disease and its complication"; and there is "no link to autism." During the outbreak, media discourses in Canada were heavily pro-vaccine.<sup>46</sup> The "anti-vaxxers" were generally described as ignorant, scared, selfish or dangerous.<sup>46</sup> However, there was no evaluation on the impact of this positive discourse in mass media on public understanding and acceptance of MMR vaccination in Canada. Studies in other contexts have suggested that the MMR-autism controversy has led to a decline in MMR vaccine uptake and subsequently to the resurgence of measles in areas with sustained negative media coverage.<sup>9</sup>

Content analysis of media coverage has shown that the HPV vaccine has always been subject to controversies. In Denmark, a strong controversy occurred after the distribution of a documentary presenting interviews with families and vaccinated girls with medically unexplained symptoms: "The Vaccinated Girls – Sick and Betrayed." This controversy has led to a serious drop in HPV vaccination uptake, from around 79% (for the 2000 birth cohort) to 17% (for the 2003 birth cohort).<sup>59</sup>

Table 1 - HPV and HPV Vaccine Media Coverage

Themes	Quotes	References
<p><b>Safety and security</b></p> <ul style="list-style-type: none"> <li>• HPV vaccine is poorly understood by science</li> <li>• Questions about the length of protection</li> <li>• Long term effects</li> <li>• Side effects are not reported</li> </ul>	<p>“Our Girls Are Not Guinea Pigs.” <i>MacLeans’s</i> (August 2007).<sup>58</sup></p> <p>“However, it’s not known how long its protection will last or if women will have to receive booster shots later in life.” <i>The Globe and Mail</i> (June 2006).<sup>10</sup></p> <p>“Lead author, McGill University epidemiologist Abby Lippman, warned that the long-term effects of the Gardasil vaccine are not known.” <i>The National Post</i> (November 2007).<sup>10</sup></p> <p>“...really bad reactions have been reported, including seizures, paralysis—and worst of all, three deaths...” <i>Maclean’s</i> (August 2007).<sup>55</sup></p>	<p>Abdelmutti and Hoffman-Goetz: 2009</p> <p>Perez et al: 2016</p> <p>Vivion, Dubé and Gagnon: 2016</p>
<p><b>Promiscuity and change in sexuality</b></p> <ul style="list-style-type: none"> <li>• Idea that the vaccine could encourage sexual behaviour. This was implied by the early age of vaccination</li> </ul>	<p>“Religious and parent groups, however, are concerned that Gardasil may encourage sex by promoting the idea that it's risk-free...” <i>Time and Time Canada</i> (March 2006).<sup>55</sup></p>	<p>Abdelmutti and Hoffman-Goetz: 2010</p> <p>Casciotti, Smith and Klassen: 2014</p> <p>Zimet et al: 2013</p>
<p><b>Inaccurate information</b></p> <ul style="list-style-type: none"> <li>• Unclear presentation of the complexity of the link between HPV and cervical cancer</li> <li>• Omitted to mention that most HPV infections resolve without treatment</li> <li>• No mention of the importance of continuing cancer screening after vaccination</li> <li>• Vaccine labelled as “cervical cancer vaccine”</li> </ul>	<p>“About 40% of girls become infected with HPV within two years of becoming sexually active. By age 50, 80% of women have had the virus at some point.” <i>Time and Time Canada</i> (March 2007).<sup>55</sup></p>	<p>Abdelmutti and Hoffman-Goetz: 2009-2010</p> <p>Calloway et al: 2006</p> <p>Kelly et al: 2009</p> <p>Robin: 2007</p>

<p><b>Pharmaceutical lobbying</b></p> <ul style="list-style-type: none"> <li>• Government representatives were accused of receiving campaign contributions from Merck, which led to HPV vaccine distrust</li> </ul>	<p>“Some also whisper that it stems from too a cozy relationship with the pharmaceutical company that makes the vaccine.” <i>The Globe and Mail</i> (March 2007).<sup>10</sup></p> <p>“Some critics questioned Health Canada’s speedy adoption of Gardasil, saying it followed a massive lobbying campaign by its makers, Merck-Frosst.” <i>The National Post</i> (November 2007).<sup>10</sup></p>	<p>Abdelmutti and Hoffman-Goetz: 2009.</p> <p>Casciotti, Smith and Klassen: 2014</p>
<p><b>Ethical issues</b></p> <ul style="list-style-type: none"> <li>• HPV vaccine inequitably distributed (girls only)</li> <li>• Consent forms are not clearly informing girls</li> </ul>	<p>“...the current push for young girls to be immunized largely ignores the group of women most affected [by cervical cancer]: immigrants, refugees, Aboriginals, the disabled, poor and those living in remote regions...” <i>Macleans</i> (August 2007).<sup>55</sup></p>	<p>Abdelmutti and Hoffman-Goetz: 2010</p> <p>Casciotti, Smith and Klassen: 2014</p> <p>Vivion, Dubé and Gagnon: 2016</p>



Even if the number of articles that were positive towards the HPV vaccine did increase over time compared to negative articles, controversies could still spark easily,<sup>58</sup> as shown by recent examples in Ontario and Quebec. In February 2015, the Toronto Star has published an article entitled “A wonder drug’s dark side,” questioning HPV vaccine safety;<sup>60</sup> a request for a moratorium on the public HPV vaccination program was published in *Le Devoir* in 2015.<sup>61</sup>

In summary, these examples have shown how vaccines could be presented negatively or positively by traditional media, depending on the circumstances and the risk context. Media coverage can also have an impact on vaccine acceptance, as negative media coverage may lead to a decrease in vaccine confidence and an increase in perceived vaccine risk.<sup>9,17</sup> Also, even if the content is supporting vaccination, the media might present inaccurate information or biased information that may need to be rectified by health officials.<sup>55</sup> However, controversies and misinformation could not be addressed by simply providing accurate information. As stated by Nyhan and collaborators: “Pro-vaccine messages do not always work as intended. The effectiveness of those messages may vary depending on existing parental attitudes toward vaccines.

For some parents, they may actually increase misperceptions or reduce vaccination intention.”<sup>62</sup> For instance, one study shows a variation in vaccine uptake between different groups that were exposed to the same media coverage.<sup>7</sup> During a 2003 polio outbreak in Israel, an association was observed between media exposure in favour of oral polio vaccine (OPV) and vaccination uptake. This association was mostly among Jews and individuals of higher socio-economic status.<sup>7</sup> This aspect indicates the complexity of communication as a “one size fits all” message cannot be applied.

Media attention to vaccination can be the result of different factors. To attract readers, specific types of media, such as tabloids, often go for stories covering sensational issues with highly emotive content and are less likely to cover more sober, scientific issues.<sup>63</sup> For instance, these sensational issues can include concerns about safety, reported cases of diseases despite the existence of a vaccine, reports of Adverse Event Following Immunization (AEFI), or claims by anti-vaccination groups. The introduction of new vaccines can also create significant media attention. The World Health Organization (WHO) has listed the different conditions that may draw media and public attention to vaccines.<sup>64</sup>

#### What draws media/public attention to a story?<sup>64</sup>

- Emotion or fear
- Disaster or other high-profile event
- Drama with personal aspects (e.g. thalidomide)
- Controversy or conflict (e.g., minister versus industry)
- Unknown or uncertain cause
- Exposes malpractice and negligence
- Many people affected
- Unexpected (measles vaccine and autism)
- Polarity of views
- Location (close to own country or hospital)
- Discussion (miracle drug or poison, stereotypes to fall back on)
- Celebrity link — heroes and heroines
- Children or pregnant women involved
- Credible/believable rumour or media story

#### They like

- The dramatic
- Accuracy and simplicity
- Statistics with explanation, if possible
- Context (part of a wider picture)
- Comments or explanation from the highest authority possible
- Controversial issues
- To investigate both sides of a story
- A timely response

#### They will ask

- WHO is affected/is responsible?
- WHAT has happened? What is being done?
- WHERE has it happened?
- WHEN did it happen?
- WHY did it happen?

# How to address vaccine controversies in traditional media

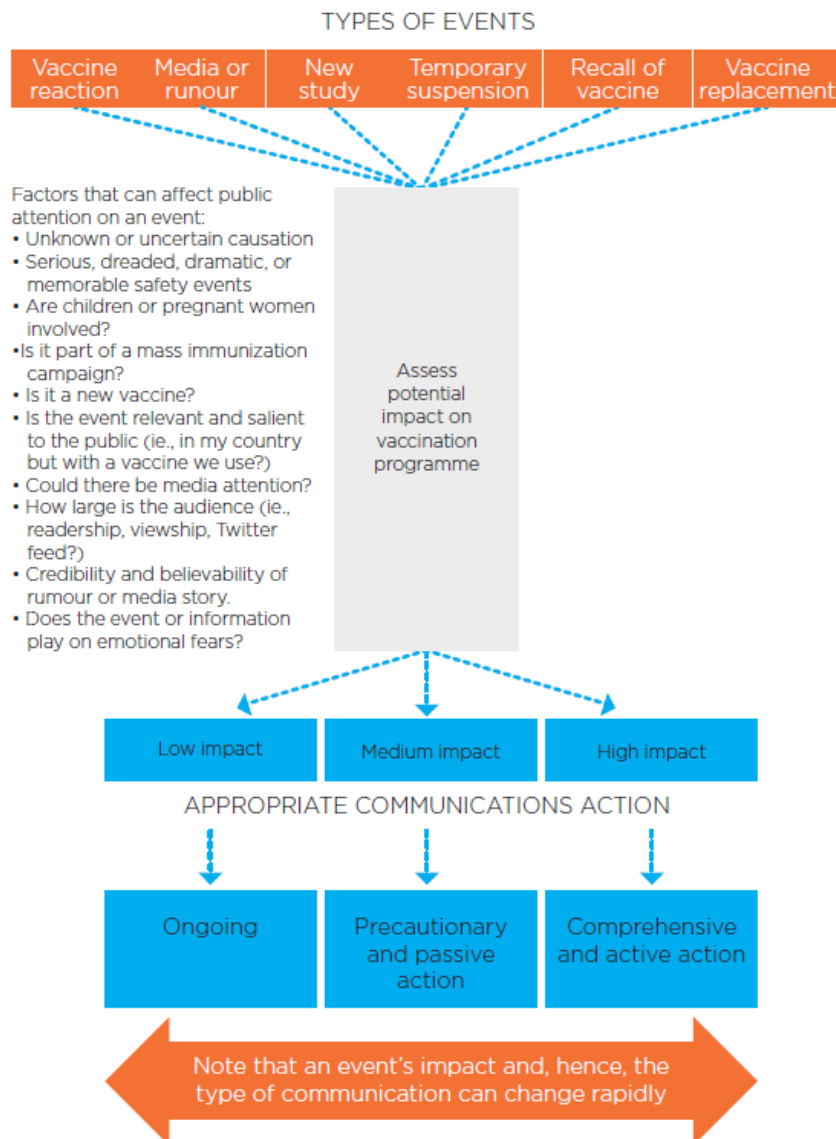
Before developing tools, it is important to have a complete understanding of the vaccine-related events, as this will lead to the appropriate communication action.

In addition, not all events will have the same impact on public acceptance of the vaccination program. For instance, the recall of a vaccine in another country that is not used in Canada is likely to have low impact, whereas a serious vaccine reaction during a mass campaign in Canada is likely

to have a high impact. A good understanding of the vaccine-related events and potential impacts is needed in order to develop a communication response.

Figure 1 illustrates different communication actions by assessing the potential impact on vaccination programs by the type of vaccine-related event.

Figure 1 - Types of Vaccine-Related Events<sup>64</sup>



# Developing a vaccination communication plan

Media communication needs planning; therefore it is essential to develop an appropriate media communication plan. For example, the WHO has developed a

communication plan template to help identify major topics that a communication plan should include.<sup>64</sup>

Figure 2 - Communication Plan Template<sup>64</sup>

Begin with a clear picture of what you want to accomplish and why you want to accomplish it. Set realistic, measurable goals that support the program and the organization. Working through the following steps will help you create a communications plan.

1. **Background:** Define the problem or opportunity. Appropriate objectives cannot be set without a clear understanding of the problem. The background is a situation analysis that explains the context of the communications initiative being undertaken.
2. **Goals:** The goals are generally to inform, persuade, motivate or achieve mutual understanding.
3. **Objectives:** The objectives should be focused on the audience and be measurable. Include two to three statements that will support the achievement of your goals, for example:
  - Informational (awareness)
  - Motivational (action-oriented).
4. **Target audience:** Identify specific common-interest groups to whom the communications messages will be directed. Prioritize audiences in order of importance. It is helpful to develop around three key messages for each target audience, each with two supporting facts. These messages should be kept simple, short, and concise.
5. **Choose messages:** Pinpoint what you want the audience to hear and retain. Design the key information that should be communicated. Think of general conceptual messages. What do they need to hear, about what, and what do you want them to do? It is helpful to develop around three key messages for each target audience, each with two supporting facts. These messages should be kept simple, short, and concise.
6. **Develop strategies:** The strategy describes how the objective is to be achieved. A strategy is a plan of action that provides guidelines and themes for the overall effort. Communications tools that can be used to implement strategies include news releases, brochures, radio announcements, special events and media interviews. Make sure the chosen communication tools are appropriate for each audience.
7. **Coordinate time frame:** Develop a timetable that shows the start and completion time of each strategy.
8. **Budget:** How much will it cost to implement the communications plan?
9. **Evaluation:** Build in evaluation criteria — these should be realistic, credible and specific. The most widely practised form of evaluating communications plans is the compilation of press clippings, and radio and television coverage so as to measure the response to the “call to action.”

While all sections of the communication plan are essential for a successful public health communication, we will concentrate on how to develop messages.

# Developing the messages

Messages should be developed by taking different aspects into consideration. First, vaccine information can be very complex, so it is important to simplify complex information. The communication plan needs to be tailored to the audience and the information needs to be simple to understand. For example:

- Avoid medical jargon or complex technical or scientific data. Instead, present information in layman's terms (e.g., "upper arm muscle" rather than "deltoid").
- Use active language. Make every sentence active.
- Be positive. Talk about what you can do, not what you cannot.
- Keep it short. Stick to one key message, one memorable sentence that is 10-15 seconds long.
- Be specific. Address a particular challenge and a specific audience.
- A well-chosen design of printed material may speak louder than words. Use compelling photographs, an unusual size format, or some other creative feature, but do not assume that a publication needs to be glossy. A simple presentation may be more effective. If you invest a great deal of resources in researching and writing a publication, be sure to also invest sufficient resources to ensure that it is appropriately designed and widely distributed.<sup>64</sup>

Second, it could be difficult to communicate complex ideas regarding vaccines, such as explaining that there is less risk in pursuing the course of action A rather than the course of action B; the audience may hear and understand only part of your message.<sup>64</sup> When a vaccine crisis arises, the audience may become fearful and generate anger, frustration, fear, outrage or concern. These emotions should be taken into consideration when the message is delivered.<sup>64</sup>

## How to address a myth

As mentioned before, myths about vaccination, such as the link between MMR vaccine and autism, still persist despite the study being retracted. Cook and Lewandowsky indicate that debunking a myth could actually reinforce the myth since once people receive misinformation it is quite difficult to remove its influence.<sup>65</sup> Cook and Lewandowsky have identified different risks in debunking myths, called "backfire effects", and how to address those risks when communicating with the public.

**The Familiarity Backfire Effect:** To debunk a myth, we need to mention it. However, this could reinforce the myth.<sup>65</sup>

**What to do:** Not mentioning the myth is sometimes not a practical option. In this case, the emphasis of the debunking should be on the facts. The often-seen technique of headlining the debunking with the myth in big, bold letters is the last thing to do. Instead, communicate your core fact in the headline. The debunking should begin with an emphasis on the facts, not the myth. The goal is to increase people's familiarity with the facts.<sup>65</sup>

**The Overkill Backfire Effect:** Giving too much information or argument can make the information difficult to process. The "Overkill Backfire Effect" occurs because processing many arguments takes more effort than just considering a few.<sup>65</sup>

**What to do:** The solution is to keep the content lean, mean and easy to read. Making the content easy to process means using every tool available. Use simple language, short sentences, subheadings and paragraphs. Avoid dramatic language and derogatory comments that alienate people. Stick to the facts.<sup>65</sup>

**The Worldview Backfire Effect:** The third and arguably most potent backfire effect occurs with topics that tie in with people's worldviews and sense of cultural identity. Several cognitive processes can cause people to unconsciously process information in a biased way. For those who are strongly fixed in their views, being confronted with counter-arguments can cause their views to be strengthened.<sup>65</sup>

**What to do:** The "Worldview Backfire Effect" is strongest among those already fixed in their views. There is a greater chance of correcting misinformation among those not as firmly decided about hot-button issues. This suggests that outreaches should be directed towards the undecided majority rather than the unswayable minority.<sup>65</sup>

Second, messages can be presented in ways that reduce typical psychological resistance. For example, when worldview-threatening messages are coupled with so-called self-affirmation, people become more balanced in considering pro and con information.<sup>65</sup>

### **Filling the gap with an alternative explanation**

When a myth is debunked, a gap is created in the person's mind. To be effective, the debunking must fill that gap.<sup>65</sup>

**What to do:** One gap that may require filling is explaining why the myth is wrong. Another alternative narrative might be to explain why the misinformer promoted the myth. Arousing suspicion of the source of misinformation has been shown to further reduce the influence of misinformation. Another key element to an effective rebuttal is using an explicit warning ("watch out, you might be misled") before mentioning the myth. Graphics are also an important part of the debunker's toolbox and are significantly more effective than text in reducing misconceptions.<sup>65</sup>

## Communicate

### **Best communication practices in interaction with journalists**

Interactions with journalists can be stressful. In the context of press releases, briefing, or press conferences leading to an interview on peak-hour television or radio news, different tips and tools can be useful.<sup>64,66</sup> The tips below are based on WHO's "do's and don'ts" for communicating with journalists.<sup>64,66</sup>

#### **Do's of verbal communication<sup>64,66</sup>**

- Do scenario planning: identify important stakeholders; anticipate questions and concerns; prepare messages; test messages; anticipate follow-up questions, and rehearse responses.

- Listen to, acknowledge, mirror and respect the fears, anxieties and uncertainties of others.
- Remain calm and in control, even in the face of public fear, anxiety and uncertainty.
- Prepare three key messages that are simple.
- Emphasize high safety instead of low risk (framing); emphasize the high level of safety of the vaccine rather than the low probability of AEFIs.
- Underline scientific consensus with regards to vaccine safety and efficacy.
- Emphasize the social benefit of vaccines.
- Tell the truth: Be honest during any discussion.

### Don'ts of verbal communication<sup>64,66</sup>

- Don't repeat the anti-vaccine argument: stick to your facts and repeat your key message instead of repeating any anti-vaccine argument.
- Avoid humour.
- Do not question deniers' motivation; avoid raising questions about the personal motivation of vocal vaccine deniers.
- Avoid attacking the credibility of those with higher perceived credibility; join hands, as appropriate, with old adversaries; seek, engage and make extensive use of support from credible third parties.

Verbal communication can be prepared by anticipating questions that will be asked. In a crisis context, WHO has identified questions that journalists always ask (figure 9).<sup>67</sup> Journalists can ask difficult questions, but being prepared can help to keep the discussion focused on the key public health messages.

In addition, journalists tend to use different strategies during interviews or press conferences. Being aware of these strategies can help you be better prepared when communicating with journalists. Based on the WHO document, seven types of questions are presented in Table 2.

Figure 3 - Common Journalists Questions<sup>67</sup>

- Why did this happen?
- What was the cause?
- Did you have any forewarning that this might happen?
- Why wasn't this prevented from happening?
- What else can go wrong?
- If you are not sure of the cause, what is your best guess?
- Who caused this to happen?
- Who is to blame?
- Could this have been avoided?
- Do you think those involved handled the situation well enough?
- When did your response to this begin?
- When were you notified that something had happened?
- Who is conducting the investigation?
- What are you going to do after the investigation?
- What have you found out so far?
- What is your personal opinion?
- What are you telling your own family?
- Are all those involved in agreement?
- Are people overreacting?
- Has anyone made mistakes?
- How certain are you that mistakes have not been made
- Have you told us everything you know?
- What are you not telling us?
- What effects will this have on the people involved?
- What precautionary measures were taken?
- Do you accept responsibility for what happened?
- Has this ever happened before?
- Can this happen elsewhere?
- What is the worst case scenario?
- What lessons were learned?
- What can be done to prevent this from happening again?
- What would you like to say to those who have been harmed and to their families?
- Are people out of danger? Are people safe?
- Will there be an inconvenience to employees or to the public?
- When will we find out more?
- What steps need to be taken to avoid a similar event?
- Have these steps already been taken? If not, why not?

Table 2 - Strategies used by journalists during interviews and press conferences<sup>64</sup>

Type of question	Example of question	How to respond
<b>Speculation</b>	What could happen if...? How do you think this happened? Can you suggest how...?	I wouldn't want to speculate on that. The facts are... It is important that we deal with the facts as we know them, and they are... It's too early to tell. We will have a full evaluation and find out what happened.
<b>Hearsay</b>	Dr. Smith from the Health Education Bureau told us that... A source from within the MOH has told us... How do you respond to the WHO country director who said that...? Our sources tell us...	This is the information I have... I'd like to stick to the facts... The facts are... This is what I know... I can't speak for Dr. Smith, but what I can address is...
<b>Negative slant</b>	Tell us about the E.coli outbreak that happened here today. Could this have been another disaster? Tell us about the..... Why is the MOH surveillance substandard?	The truth is... I will give you the facts as I have them... Once again, let me share with you exactly what happened... (Don't repeat the negative comment or word. Correct the inaccuracy.)
<b>Puts words in your mouth</b>	So, you think this is a very serious situation?	Let's see what's at issue here if I may...then make your positive point. (Recognize that their effort is to get you to use words you would not say. Don't argue.)
<b>Presupposition — reporter gives you completely false information to put you on the defensive</b>	Isn't it true that the MOH didn't provide enough training to local health workers because the money was used for a new building in headquarters?	Let me give you the correct information... Actually, this is what happened... The truth is... (Don't repeat the negative comment or word.)
<b>False facts and incorrect information</b>	So you have awarded 75% of your grants budget to study TB to one organization? (If a reporter provides incorrect information, it is OK to correct them.)	Perhaps I could clarify that for your (viewers, listeners, readers). That is not true...the facts are that... (Correct graciously and go to your positive point.)
<b>The dangerous silence</b>	You've given a good answer to a controversial issue... (The reporter pauses and the camera continues to roll, encouraging you to fill the silence. When the camera stops rolling, the reporter is still recording.)	Stay on your agenda. Be aware of non-verbal cues. Be comfortable with silence. It's the reporter's job to fill the air time. Don't answer questions they did not ask you.

Different techniques can be used to answer difficult questions. For example, "blocking" is a technique that consists of diverting the dialogue away from an area that you want to avoid for example by stating: "That is an interesting question, but the real issue is..."<sup>64</sup> One of the most popular techniques used to answer difficult questions is called "bridging": making a link between an area you want to avoid and an area that you can choose.<sup>64</sup> Finally, it is important to correct what is wrong, being assertive and not aggressive, staying cool, take your time, be reasonable, and, finally stick to the questions that you want to answer.<sup>64</sup>

## Conclusion

Media plays an important role in framing public perception on vaccination. Positive or negative coverage of vaccination can have an impact on vaccination acceptance and uptake.

This is why it is necessary for public health authorities to communicate appropriately with the media in order to maintain confidence in vaccination programs. As shown in this report, only bringing facts is not sufficient; the way that information is conveyed is as important as the facts that are communicated. As noted by WHO, the way a person speaks and presents the evidence plays an important role. Being a good speaker can be learned by using different techniques.<sup>66</sup> This report presents some tools to help improve communication with the public on vaccination. Additional useful information on these topics is listed in Appendix 1.



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## Appendix 1: Additional useful resources on communication and vaccination

Resource Title	Summary	Link
<b>Program Planning and Coordination</b>		
<a href="#">Four critical elements in the ongoing work to build confidence</a>	<p>This document suggests four critical elements in the ongoing effort to build and maintain confidence in vaccines and the health authorities delivering them. The suggested activities also help you prepare for events that may erode trust in vaccines or the health authorities delivering them. For each step, the document refers to relevant WHO support documents.</p>	<a href="http://www.euro.who.int/_data/assets/pdf_file/0019/333136/VSS-4-elements-confidence.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0019/333136/VSS-4-elements-confidence.pdf?ua=1</a>
<a href="#">Stakeholder management</a>	<p>This document presents a list of key vaccine-related stakeholders along with some principles for how you may establish and maintain relations with them. Stakeholder management is highly context-specific. However, by understanding who your key stakeholders are, and engaging with them, you may be able to strengthen the public's trust in immunization and in health authorities. Ideally, you will be able to limit negative interference based on misconceptions and benefit from the support of advocates. Stakeholder relations need to be established long before any crisis occurs. Use the document as a starting point for discussion and planning of stakeholder management and relations.</p>	<a href="http://www.euro.who.int/_data/assets/pdf_file/0004/337495/02_WHO_VaccineSafety_SupportDoc_StakeholderManagement_Proof8-3.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0004/337495/02_WHO_VaccineSafety_SupportDoc_StakeholderManagement_Proof8-3.pdf?ua=1</a>
<a href="#">Terms of reference for a vaccine communication working group</a>	<p>This document outlines a suggested structure and proposed contents of a Terms of Reference (TOR) for a national vaccine communication working group. Example texts for each of these elements are also provided for inspiration. Establishing a national vaccine communication working group allows you to build strong working and collaboration relations with your allies, strengthen routine communication for immunization and ensure a well-coordinated and immediate response from all involved authorities to any safety event. Use the document as a starting point for discussions and for inspiration when developing a TOR for your working group.</p>	<a href="http://www.euro.who.int/_data/assets/pdf_file/0005/337496/02_WHO_VaccineSafety_SupportDoc_TOR_Proof7.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0005/337496/02_WHO_VaccineSafety_SupportDoc_TOR_Proof7.pdf?ua=1</a>
<a href="#">Crisis communications plan template</a>	<p>This document provides guidance on the essential elements of an immunization communications plan, with special emphasis on elements that relate to crisis communication. Developing immunization communications and crisis communications plan allows you to build and maintain trust in vaccines and demand for vaccination and prepare for vaccine safety events and crises.</p>	<a href="http://www.euro.who.int/_data/assets/pdf_file/0014/333140/VSS-crisis-comms-plan.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0014/333140/VSS-crisis-comms-plan.pdf?ua=1</a>

<a href="#">New vaccine introduction: checklist for planning communication and advocacy</a>	<p>This document proposes a simple step-wise process for planning communication and advocacy for a new vaccine introduction. It includes suggested activities for four key stakeholder groups:</p> <ul style="list-style-type: none"> <li>• health care workers</li> <li>• influencers</li> <li>• media</li> <li>• public</li> </ul>	<a href="http://www.euro.who.int/_data/assets/pdf_file/0008/337490/02_WHO_VaccineSafetySupportDoc_NewVacIntro_Proof8.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0008/337490/02_WHO_VaccineSafetySupportDoc_NewVacIntro_Proof8.pdf?ua=1</a>
<b>Crisis Preparedness and Response Capacity</b>		
<a href="#">Checklist for preparedness: Are you prepared for an event that may erode public trust in immunization?</a>	<p>This document provides a checklist to test if your country is well prepared for events that may potentially erode trust in vaccines and the health system. The checklist provides inspiration and may point to areas where there is a need for improvement. It is also a good point of departure for discussions and planning with regard to immunization communication and crisis response. Use the document to prepare for a meeting with key stakeholders or as a starting point for discussions on vaccine crisis communication.</p>	<a href="http://www.euro.who.int/_data/assets/pdf_file/0010/337474/02_WHO_VaccineSafetySupportDoc_ChecklistForPreparedness_FINAL.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0010/337474/02_WHO_VaccineSafetySupportDoc_ChecklistForPreparedness_FINAL.pdf?ua=1</a>
<a href="#">Four immediate steps when responding to an event that may erode public trust</a>	<p>This document suggests four immediate steps when responding to vaccine safety-related events or other events that may erode trust in vaccines or the health authorities delivering them.</p>	<a href="http://www.euro.who.int/_data/assets/pdf_file/0018/333135/VSS-4-steps-trust.PDF?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0018/333135/VSS-4-steps-trust.PDF?ua=1</a>
<a href="#">How to ensure a context-specific response to events that may erode trust</a>	<p>This document proposes an algorithm for analyzing vaccine safety events and other events that have the potential to erode confidence in vaccines and health authorities. Analyzing events is necessary to determine the appropriate communication response. The document describes three overall kinds of events and a process to help you determine whether these events may have a low, medium or high impact on trust in vaccination and health authorities. The communication response should be planned according to this. The algorithm will allow you to ensure context-specific responses that may prevent a situation from escalating. Use the algorithm as a routine procedure whenever an event occurs.</p>	<a href="http://www.euro.who.int/_data/assets/pdf_file/0009/337473/02_WHO_VaccineSafetySupportDoc_AnalysingEvents_Proof7.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0009/337473/02_WHO_VaccineSafetySupportDoc_AnalysingEvents_Proof7.pdf?ua=1</a>
<b>Media – Ongoing Relations and Crisis Response</b>		
<a href="#">Setting the media agenda</a>	<p>This document is part of a WHO series of supporting documents concerning events that could erode confidence in vaccination. Such events can be related to vaccine safety, adverse events following immunization, changes in the vaccination programme, negative public debate, outbreaks or pandemics.</p>	<a href="http://www.euro.who.int/_data/assets/pdf_file/0009/337482/02_WHO_VaccineSafetySupportDoc_MediaAgenda_Proof7.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0009/337482/02_WHO_VaccineSafetySupportDoc_MediaAgenda_Proof7.pdf?ua=1</a>

<a href="#">Safety events: planning the immediate media response</a>	<p>This document presents a set of steps for planning the immediate media response to a vaccine safety-related event. Use the document as a starting point for internal discussions and for planning interaction with the media. Use the document together with the WHO supporting document "How to ensure a context-specific response to events that may erode trust."</p>	<a href="http://www.euro.who.int/_data/assets/pdf_file/0004/337486/02_WHO_VaccineSafetySupportDoc_MediaResponse_Proof11.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0004/337486/02_WHO_VaccineSafetySupportDoc_MediaResponse_Proof11.pdf?ua=1</a>
<a href="#">Tips for spokespersons</a>	<p>This document presents some principles for successful communications during a crisis. Following these principles will make it easier for you to ensure transparency through complete, easily understood and accurate communication. Use the document for spokesperson training and to prepare for an interview or press conference.</p>	<a href="http://www.euro.who.int/_data/assets/pdf_file/0004/333139/VSS-tips-spokepersons.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0004/333139/VSS-tips-spokepersons.pdf?ua=1</a>
<a href="#">The questions journalists always ask in a crisis</a>	<p>This document comprises almost every question you will ever get asked by journalists in a crisis. Use the document to prepare for an interview or press conference and for the training of spokespersons. It will prepare you to answer all questions and in addition make you feel and look confident and trustworthy.</p>	<a href="http://www.euro.who.int/_data/assets/pdf_file/0017/333134/VSS-journalists-questions.PDF?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0017/333134/VSS-journalists-questions.PDF?ua=1</a>
<a href="#">Strategies used by journalists during interviews or press conferences</a>	<p>This document presents some examples of the different strategies and kinds of questions that journalists use and suggestions to how you may respond to these. Being prepared for journalistic tactics makes it easier to respond and to return to your own key messages, and you will not as easily feel that you were tricked into saying something you did not intend to say. Use the document for spokesperson training and to rehearse your key messages.</p>	<a href="http://www.euro.who.int/_data/assets/pdf_file/0003/333138/VSS-journalists-strategies.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0003/333138/VSS-journalists-strategies.pdf?ua=1</a>
<a href="#">How to prepare a press release</a>	<p>This document outlines the key elements of a press release and provides some advice for each of these. It also includes model press releases as case examples for inspiration. Use the document for guidance and inspiration whenever you need to develop a press release.</p>	<a href="http://www.euro.who.int/_data/assets/pdf_file/0020/333137/VSS-press-release.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0020/333137/VSS-press-release.pdf?ua=1</a>
<b>Messaging and Reaching out the Public</b>		
<a href="#">How to prepare a message map</a>	<p>This document introduces the message map as a tool to develop clear messages. It also includes a model message map as a case example for inspiration. Clear messages help you be precise with a complicated topic, keep focus when under pressure and manage difficult questions and challenges. They will help your preparation efforts by initiating the consideration of difficult questions from the media and public while allowing you to ensure aligned messaging across many stakeholders</p>	<a href="http://www.euro.who.int/_data/assets/pdf_file/0007/337489/02_WHO_VaccineSafetySupportDoc_MessageMap_FINAL.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0007/337489/02_WHO_VaccineSafetySupportDoc_MessageMap_FINAL.pdf?ua=1</a>

<p><a href="#"><u>How to monitor public opinion</u></a></p>	<p>This document presents the inspiration for monitoring public opinion on immunization. Monitoring public opinion and perceptions is an important element in preventing crises, or limiting the damaging impact of a crisis, as it gives you an opportunity to understand your audiences better, intervene if new misconceptions arise, and shape your communication accordingly. Use the document as a starting point for internal discussions and planning regarding monitoring of public opinion.</p>	<p><a href="http://www.euro.who.int/_data/assets/pdf_file/0011/337493/02_WHO_VaccineSafety_SupportDoc_PublicOpinion_Proof4.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0011/337493/02_WHO_VaccineSafety_SupportDoc_PublicOpinion_Proof4.pdf?ua=1</a></p>
<p><a href="#"><u>Key principles for presenting data</u></a></p>	<p>Facts and figures can be powerful tools to convey messages, but only if they are concise and easy to understand. If they are unclear and confusing, they may create uncertainty, and trust in the messenger may decrease as a result. Use the document for spokesperson training, and refer to it whenever you communicate numbers to the public.</p>	<p><a href="http://www.euro.who.int/_data/assets/pdf_file/0010/337492/02_WHO_VaccineSafety_SupportDoc_PresentingData_Proof5.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0010/337492/02_WHO_VaccineSafety_SupportDoc_PresentingData_Proof5.pdf?ua=1</a></p>
<p><a href="#"><u>How to respond to concerns about vaccination</u></a></p>	<p>Responding effectively to vaccine safety concerns includes acknowledging the listener's concerns and providing honest information about the benefits and risks of immunization. This document suggests the use of the so-called CASE approach to communicate effectively about vaccines.</p>	<p><a href="http://www.euro.who.int/_data/assets/pdf_file/0006/339621/Respond-to-concerns.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0006/339621/Respond-to-concerns.pdf?ua=1</a></p>
<p><a href="#"><u>Vaccine safety messages (frequency of AEFIs)</u></a></p>	<p>This document presents key messages concerning vaccine safety and adverse events following immunization (AEFI) and includes supporting facts for each message.</p>	<p><a href="http://www.euro.who.int/_data/assets/pdf_file/0010/339625/Vaccine-safety-messages.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0010/339625/Vaccine-safety-messages.pdf?ua=1</a></p>
<p><a href="#"><u>Societal benefits of immunization</u></a></p>	<p>This document presents the wider societal benefits of immunization as related to poverty, maternal health, equity, education, child mortality and health systems strengthening.</p>	<p><a href="http://www.euro.who.int/_data/assets/pdf_file/0009/339624/Sociatal-benefits.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0009/339624/Sociatal-benefits.pdf?ua=1</a></p>
<p><a href="#"><u>Myths and facts about immunization</u></a></p>	<p>This document provides suggested answers to some prevalent myths concerning immunization.</p>	<p><a href="http://www.euro.who.int/_data/assets/pdf_file/0005/339620/Myths-and-facts.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0005/339620/Myths-and-facts.pdf?ua=1</a></p>
<p><a href="#"><u>Risk scales: benefits of vaccines far outweigh the risks</u></a></p>	<p>The risk of adverse events following vaccination needs to be compared with the risk associated with the disease. The risk of side-effects of the treatment used to alleviate the symptoms of the disease can also be taken into account. This document illustrates both of these types of risk comparisons for three types of vaccines that are used to prevent highly infectious diseases: measles vaccine, pneumococcal conjugate vaccine and Haemophilus influenzae B (Hib) vaccine.</p>	<p><a href="http://www.euro.who.int/_data/assets/pdf_file/0007/339622/Risk-scales.pdf?ua=1">http://www.euro.who.int/_data/assets/pdf_file/0007/339622/Risk-scales.pdf?ua=1</a></p>