

## Responses to Common Questions<sup>8,9</sup>

Myth	Suggested Points for Response
<b>1. Multiple Injections overwhelm the baby's immune system</b>	<ul style="list-style-type: none"> <li>• Babies are born with thousands of antibodies.</li> <li>• New babies come in contact with millions of germs when born and their immune system can respond immediately.</li> <li>• Babies can make over 1 billion antibodies, and could theoretically handle up to 10,000 shots at any one time.</li> <li>• New vaccines have significantly fewer antigens than their counterparts in the past.</li> </ul>
<b>2. Babies are getting too many shots</b>	<ul style="list-style-type: none"> <li>• Vaccines are just a small part of what babies encounter every day.</li> <li>• Babies are most susceptible to the severe consequences of many vaccine-preventable diseases.</li> <li>• Most vaccines are formulated in multi-antigen formats to limit the need for office visits and injections.</li> <li>• Multiple vaccines are safe to give at one time. They only use a fraction of the immune system to generate the immune response.</li> <li>• Vaccines do not harm the immune system but prime and train it to defend, rapidly against vaccine-preventable diseases before illness can occur.</li> </ul>
<b>3. The link of vaccines to autism</b>	<ul style="list-style-type: none"> <li>• Parents may encounter poorly designed and conducted studies, misleading summaries of well-conducted studies, or anecdotes made to look like science—claiming that vaccines cause autism.</li> <li>• The onset of regressive autism symptoms often coincides with the timing of vaccines but is not caused by vaccines.</li> <li>• Many studies refute the link of MMR vaccine to autism.</li> <li>• Autism rates have increased even though fewer children have been vaccinated with the MMR vaccine.</li> </ul>
<b>4. The preservative thimerosal contains mercury and it causes severe problems</b>	<ul style="list-style-type: none"> <li>• Thimerosal has not been used in routine childhood vaccines in Canada since 2001.</li> <li>• There is no scientific evidence that thimerosal has caused brain damage or other neurologic problems as a result of vaccination.<sup>10</sup> Ethylmercury in thimerosal is very different from methylmercury, which can cause severe brain damage.<sup>10</sup></li> </ul>
<b>5. Vaccines contain formaldehyde which is very dangerous</b>	<ul style="list-style-type: none"> <li>• Formaldehyde is used in the production of vaccines to kill and inactivate viruses and bacteria.</li> <li>• It is naturally found in our bodies and is essential for human metabolism and the synthesis of amino acids.</li> <li>• The amount in an infant's circulation is much higher than the amount contained in any vaccine.</li> </ul>
<b>6. Vaccines contain aluminum and this is very toxic to children</b>	<ul style="list-style-type: none"> <li>• Aluminum has been used as an adjuvant for the past 70 years in vaccines.</li> <li>• It enhances the immune response to vaccines.</li> <li>• Vaccines contain the same amount in breast milk and infant formula.</li> <li>• They have been found to be very safe.</li> </ul>
<b>7. Vaccines contain human and animal cells</b>	<ul style="list-style-type: none"> <li>• Although human and animal cells may be used in the production of vaccines, they have been removed by the purification process.</li> <li>• Trace amounts of cellular proteins may remain.</li> </ul>
<b>8. Natural infection is better than a vaccine</b>	<ul style="list-style-type: none"> <li>• The immune response after most vaccines is similar to immunity that is induced by the disease without the risk of disease.</li> <li>• Natural disease can kill or seriously harm the child, where vaccines have the benefit of protection and the lack of problems of disease.</li> </ul>
<b>9. Vaccines cause more harm than the disease they are preventing</b>	<ul style="list-style-type: none"> <li>• Fever, redness and tenderness where a shot was given and fussiness are common post-vaccination.</li> <li>• Remind parents that serious adverse effects are uncommon and consider sharing your own experience, if any, with seeing serious side effects from a vaccine.</li> <li>• Vaccines are one of the most monitored tools in modern medicine. Serious reactions such as anaphylaxis are so rare and occur in 2 patients per 1,000,000 immunizations given.</li> </ul>
<b>10. Vaccines don't prevent diseases, they were already on the decline due to better sanitation and clean water</b>	<ul style="list-style-type: none"> <li>• Diseases dropped rapidly with the introduction of new vaccines to the Canadian market.</li> <li>• Better living conditions did not reduce the risk of disease but decreased the mortality rate from these infections.</li> </ul>