

Protecting the herd

As rows about who does and who doesn't get flu jabs become national news stories, Catherine Heffernan explains why local authorities should play their part in making sure children are vaccinated against other diseases.

While shopping in the supermarket last week, I noticed a scurry to the nearest display of Pampers' nappies. It wasn't the usual offer that had enticed the crowd but the promise that for every packet bought, a tetanus vaccine would be sent to the Third World.

"Those poor children", one shopper said to me. "Tetanus, you know, is a deadly disease, you go into spasms before you die. We are so lucky here."

This was ironic. I was after all standing in an area where only 68 per cent of children aged 5 years old had received their childhood immunisations. That meant that about 42 per cent of children aged 5 years old were at risk of getting vaccine preventable diseases, including tetanus. The ramifications are much more.

Vaccination isn't just about protecting oneself from disease; it is a vital step in stopping the transmission to other people. This is called herd immunity. To illustrate, take a children's party. All the children interact unaware that one of them has the early stages of measles. Two of the kids have baby brothers and sisters, who have not yet had their MMR. One of these babies is immunocompromised and would be severely affected if infected with measles. However, neither baby is at risk as all children have been immunised with MMR. They formed a barrier preventing the spread of measles from the infected child to them and onto others. We need 95 per cent uptake of

the children's population in order to effectively protect the entire population from dangerous diseases like diphtheria, polio, whooping cough, meningococcal and pneumococcal diseases.

In the UK, the childhood immunisation schedule consists of the primaries (diphtheria, tetanus, polio, Hib and whooping cough), the MMR (measles, mumps and rubella), vaccines against common causes of meningitis in children and school boosters. The schedule starts at two months, with two more visits at three and four months. At 12 and 13 months, there are three further vaccines, including the first dose of MMR and then before the child starts school, there is the second MMR and some boosters. Sadly, there are parts of the UK where uptake

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of childhood immunisations have drastically declined. London in particular has recorded low numbers of vaccinated children. This has been reflected in the frequent outbreaks of measles across the capital. The reasons for the dropping figures are multitude.

There were some issues with data collection and quality. Changes to a new child health information system resulted in differences between what the GP practices recorded and the system that reported the COVER data (i.e. UK's rates). However, these issues have been more or less resolved in the past year or two. Another problem has been that the contracts between those who commission vaccinations and those who deliver them tend not to reflect the 95 per cent herd immunity. For example, some GP contracts may financially reward GP practices if they deliver 70 or 90 per cent coverage but without the incentive to 95 per cent, it can be difficult to get those extra percentages. However, a big stumbling block is parental attitudes.

While the MMR scare is becoming a distant history, the public distrust of vaccines remains. Some parents believe that the vaccine will infect them with the diseases or harm them by adverse side effects. Underlying these fears is the assumption that here in the western world, we are safe. Since these diseases are no longer visible, people have forgotten how dangerous these diseases really are. It wasn't so long ago that people were on iron lungs due to polio or disabled from diphtheria. Given the ease with which we travel around the world these days, these diseases could be on our doorstep tomorrow.

After clean water, vaccines are our greatest defence against disease. As leaders, we owe it to our public to improve their awareness of how important childhood vaccination is. Yes, there can be side effects, and apart from a temperature (which shows that the body is reacting to the vaccine and is producing immunity), these are mostly rare.

At the end of the day, you need to ask yourself, what's worse: a jab with a temperature or your child, unborn child or even yourself being seriously ill from a dangerous disease? Local authorities can help protect their populations by working with the directors of public health in arming the public with all the facts. It is all our responsibility to ensure our burgeoning population remains safe. 

