

Office of the Medical Officer of Health

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Dear Colleague

It has come to my attention in the last few days that there are some parents expressing concerns about the vaccine programme we have set up to protect Jersey's children from influenza (flu). The concerns I have been told about seem to be based on misunderstanding. I hope that this letter from me, setting out the facts as I understand them, will help you and colleagues to have well-informed discussions with any concerned parents (or, indeed, children) and be in a better position to allay such concerns.

Jersey is in the fortunate position of having a well-established, funded programme to prevent our schoolchildren (now all the way up to Year 11) from the prolonged misery that usually comes with full-blown influenza, common in each winter flu season – normally November/December until March. Children are at higher risk than adults both of catching, and spreading flu between themselves, and to their families and beyond. Obvious consequences of a child infected with flu are time off school, for the infected child and often time off work for at least one parent, often for up to two weeks.

Such a programme has become feasible because a safe and effective nasal flu vaccine, Fluenz, is available.

The concerns I have been hearing about, propagated and amplified on social media, are that the vaccine contains 'live' influenza virus, and could *infect* children instead of protecting them. It does not. Fluenz is a 'live attenuated vaccine', '**attenuated**' meaning that processing has weakened the virus to render it incapable of actually causing influenza infection. Such vaccines work by prompting the immune system to produce its own antibodies, ready to prevent the vaccine-protected person from becoming infected by 'real' flu when the seasonal (winter) flu virus starts circulating. By contrast, real, un-attenuated 'wild' flu virus **is** very infectious, by respiratory and droplet, as well as contact spread, especially between children in a normal winter flu season.

The further rumour I have heard about is based on a worry that other children, or even staff members, could be at risk of infection if they are in the same environment as children receiving vaccine. This is **not** the case for the following reasons:

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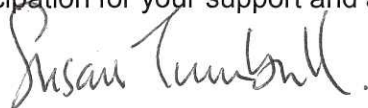
- The first is that the vaccine is attenuated and cannot cause infection anyway (see above);
- Even if it could cause infection, the next reason is that the vaccine fluid - a tiny amount, only 0.1ml (a 50th of a teaspoonful) into each nostril - is quickly absorbed there. Contrary to the rumours circulating, there is **not** any sort of external 'mist' created in the atmosphere.
- Even if there was potential for external or sidestream escape of vaccine fluid or a 'mist', the vaccine is designed to be effective only at the temperature in the nose. It has no effect at all at air temperature.
- It doesn't work at body temperature either (such as in our lungs) so even if there was any possibility that it could be 'breathed in', nothing would happen. That is why it couldn't vaccinate someone inadvertently (nor, indeed, infect them).

It seems that there are two main reasons why misplaced concerns about perceived risk may have sprung up:

- the first is that promotional material in the US about their similar vaccine shows it squirted into the air and creating a fine mist. I understand this was considered a good idea to reassure parents how gently the spray would come out inside their child's noses, in case any were concerned it might feel uncomfortable. To make matters (and the potential for understandable misunderstandings) worse, the US name for their vaccine is 'Flumist'. As noted above, there is no external 'mist' created when the vaccine is administered as recommended inside the nose, with the Flumist US vaccine, or with the brand we use (Fluenz);
- The second is that the very detailed information which manufacturers are required to publish about any medicinal product includes (in this case) a reference to a very low theoretical risk of flu infection to individuals who have **very severe** immunosuppression. Such circumstances are (thankfully) very rare indeed. Affected individuals (such as bone marrow transplant patients) would already be subject to many measures, usually including isolation, to protect them from any potentially infectious circumstances which would be of risk to them (despite being of negligible risk to everyone else), for the period whilst their immune system was effectively fully suppressed and thus non-functional. For legal reasons, manufacturers are required by law to spell out any such possibilities, however remote they may be and even when they may be only theoretical.

I would be really grateful, if you are aware of any other reasons for concern apart from those I have covered in this letter, if you could please let me or my colleague Dr Linda Diggle know by email: s.turnbull@gov.je or l.diggle@health.gov.je. If there are any substantially different rumours developing or already circulating, it is best if we try to address them quickly by offering good, well-founded information. It would be a terrible shame if misinformation generating misplaced concern were to stop some of our children from receiving safe and effective protection from infection in the coming flu season. If my own (now adult) children were still of school age, I would want them to be at the front of the queue for this and all other safe, effective vaccines (as indeed they were), and as my two small grandchildren currently are too.

Thank you in anticipation for your support and assistance,



Dr Susan Turnbull MB BS MSc MRCGP FFPH
Medical Officer of Health