Responses to questions raised by the recent 'Anti flu vaccination' letter

What do we know about the safety record of this vaccine? Has it been properly tested? I've been told that this particular vaccine carries a black triangle ($\mathbf{\nabla}$) warning to report any adverse reactions as part of the research into side effects.

Since 2013, millions of doses of this vaccine have been given in the UK and it has an excellent safety profile. The vaccine is also used in a number of other countries worldwide (including the US), with a similarly excellent safety record.

The vaccine (that has the trade name of 'Fluenz Tetra') used to have a black triangle symbol from 2013-19, but no longer requires this symbol. Before being granted a UK licence, all vaccines go through a rigorous assessment of evidence relating to their safety, quality and effectiveness. Following the introduction of a newly licensed medicine into the UK, it is given a black triangle symbol, usually for five years. This symbol is used as a reminder to healthcare professionals and the public to report all suspected side-effects to the Medicines and Healthcare Products Regulatory Agency (MHRA).

Vaccine safety is carefully and continuously monitored by the MHRA even when a vaccine no longer carries the black triangle symbol.

I've heard that the nasal flu vaccine contains live virus. Will this put my child at risk of flu or even COVID-19?

The nasal spray flu vaccine contains small amounts of extremely weakened flu viruses, but does NOT cause flu in children.

Flu and the coronavirus are entirely different families of diseases. The flu vaccine does not contain SARS-CoV-2, which is the new coronavirus strain that causes COVID-19.

Can others be exposed to the flu virus if they are in the same room as a child who is being given the nasal spray? What about those who are immunocompromised?

The nasal spray delivers only 1/50th of a teaspoon of fluid into each nostril. No 'mist' of vaccine virus escapes into the air, so other people in the room are not at risk of "catching" the vaccine virus. The room in which the vaccine has been given does not require any special cleaning afterwards.

Although in theory, people in the same room could be exposed to the vaccine virus if it was accidentally released outside of the child's nose, during the many years of using this vaccine (in the UK and US), no transmission of this sort has been reported to date.

In the US, where there has been extensive use of this vaccine for many years, serious illness amongst immunocompromised contacts who are naturally exposed to vaccine virus has never been observed. In addition to this, the tiny number of children who are extremely immunocompromised (for example those who have just had a bone marrow transplant), are already advised not to attend school because of the definite and much higher risk of contact with other infections that spread in schools. Expert doctors at Great Ormond Street Hospital, who deal with many children with very serious immune problems, do not recommend keeping such children off school purely because of vaccination

Is it true that children who've been given the nasal vaccine can shed the virus for a few days after vaccination?

Vaccinated children do shed vaccine virus for a few days after vaccination, but the amount of virus shed is normally below that needed to spread infection to others and the virus does not survive for long outside of the body. This is in contrast to natural flu infection, which spreads easily during the flu season. In schools where vaccine is being offered therefore, the overall risk of contact with flu viruses is massively reduced by having most children vaccinated.

How effective is the vaccine at preventing flu in children?

The effectiveness of the vaccine will vary from year to year, depending on the match between the strains of flu in circulation and those contained in the vaccine. Since the introduction of this programme for children in the UK in 2013, the vaccine effectiveness for laboratory confirmed infection has been good. During 2014/15, pilots were carried out in selected areas of England in which all primary school aged children were offered the vaccine. These areas saw a 93% reduction in hospital admissions due to confirmed flu and a 94% reduction in GP consultations for flu-like illness in primary school children.

I am worried about an ingredient in the flu vaccine called Polysorbate 80.

Polysorbate 80 is a common food additive and is used, for example, in ice cream. It is used in several vaccines as an emulsifier, which holds other ingredients together. Compared to its use in foods, there is very little Polysorbate 80 in vaccines.