What are the risks of sending my child back to school?

DATE OF RETURN	JUN 1		JUN 15		SEP 1	
	School	*home*	**school**	*home*	**school**	*home*
WHAT IS THE CHANCE MY CHILD WILL BE EXPOSED TO A CONTAGIOUS CLASSMATE?	**4.21%**	*1.76%*	**2.09%**	*0.87%*	**0.49%**	*0.19%*
WHAT IS THE CHANCE MY CHILD WILL CATCH THE VIRUS TODAY?	**1.46%**	*0.61%*	**0.72%**	*0.30%*	**0.15%**	*0.06%*
WHAT IS A CHANCE MY CHILD WILL DIE FROM THAT INFECTION?	**0.23/M**	*0.10/M*	**0.11/M**	*0.05/M*	**0.025/M**	*0.01/M*

This table summarises the risk of sending your child to school, if returned to a classroom of 15 pupils on June 1st, June 15th, and September 1st. It shows the probability of exposing your child to contagion, the probability of contracting an infection and the subsequent chance of dying from that contagion. These estimates are based on infection mortality rates for children of nine years of age or younger. The numbers in bold correspond to what might happen if you send your child to school, while the numbers in italics are equivalent estimates when keeping your child at home. In brief, deferring a return to school from the 1st to the 15th of June word roughly halve these measures of risk. The risk of sending your child to school increases the overall risk by about 2.4. To put things in perspective, the risk that you will be killed in a road traffic accident today is about 0.074 per million (**0.07/M**). This means, that by September, the daily risk of exposing your child to a fatal infection becomes substantially less than the risk of being killed in a traffic accident. However, the risk of fatality is about three times greater with a return to school on June 1st, falling to less than twice the risk of a fatal traffic accident if you defer sending your child back until June 15th.

Notes: the probability of one or more children in a class of 15 being contagious can be evaluated as one minus the probability of all 15 children not being contagious. This can be computed from the probability that any child sampled at random from the population is contagious – as estimated under a dynamic causal model of new cases and deaths in the UK. Similarly, the probability of contracting an infection is one minus the probability of not being infected, where the probability of infection depends upon the expected number of contagious contacts and the transmission strength: i.e., the probability of contracting the virus following contact with a contagious child. Finally, the probability of dying from an infection acquired today can be evaluated using the infection mortality rate for the appropriate age range.