



## Letters

# Adults still account for many deaths from chickenpox

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**Norman Noah** ([norman.noah@lshtm.ac.uk](mailto:norman.noah@lshtm.ac.uk)), professor of public health

*London School of Hygiene and Tropical Medicine, London WC1E 7HT*

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EDITOR—It was good to learn from Brisson et al's letter that the trend of an increasing number of deaths from chickenpox has reversed in the three years since colleagues and I completed our survey. <sup>1 2</sup> However, Brisson et al disagree with our claim that deaths in adults are rising and state that this is misleading.<sup>1</sup>

Our conclusion that adult deaths had risen was based on statistics covering a period of 31 years (1967-97). Among certified deaths from chickenpox adults accounted for 48% in 1967-77 (88 deaths in 11 years), 64% in 1978-85 (120 deaths in eight years),<sup>3</sup> and 81% in 1986-97 (269 deaths in 12 years).

The contention that our data are misleading on the basis of three further years of data compared with our span of 31 years clearly needs to be placed in context. Moreover, there is a precedent for periods of lower mortality, as discussed below for the period 1989-91. The main body of our paper stated that deaths from chickenpox in adults have increased in number and proportion. We inadvertently used the present tense in the abstract and cannot claim to see into the future.

We looked at deaths noted by the Office for National Statistics for the 13 years 1985-97 (table). This table, which was not published in our paper for reasons of space, shows that, except in two years, the annual number of deaths was fairly consistent. The exceptions were 1989 and 1996, when the case fatality rates based on consultation rates from the Royal College of General Practitioners were also exceptional. We have no explanation for this.

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Year	No of RCGP consultations per 100 000	No of ONS certified deaths	No of cases in population *	Case fatality rate per 100 000
1985	544	271 891	25	9.19
1986	556	278 890	25	8.96
1987	514	258 748	24	9.28
1988	621	313 729	30	9.56
1989	699	354 393	19	5.36
1990	552	280 858	24	8.55
1991	554	283 089	24	8.48
1992	653	334 839	27	8.06
1993	643	330 753	30	9.07
1994	623	321 593	23	7.15
1995	484	250 809	22	8.77
1996	597	310 500	39	12.56
1997	486	253 746	20	7.88
Average	579	276 295	26	9.22

- RCGP=Royal College of General Practitioners. ONS=Office for National Statistics.  
\*Based on RCGP consultation rates.

**Table 1**  
**Numbers of certified deaths from chickenpox and estimated case fatality rates in England and Wales, 1985-97**

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The total number of deaths in 1986-8, 1989-91, 1992-4, and 1995-7 were 26, 22, 27, and 27 respectively. This does not show that, as Brisson et al state, "The number of deaths from chickenpox and case fatality rates were significantly higher in 1995-7 [the period of our study] than at any other period." The overall case fatality rates in the table do not show this either.

The main messages of our paper are that mortality from chickenpox is not negligible; adults account for a high proportion of deaths; and the number and proportion of adult deaths increased substantially between 1967 and 1997.

## References

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