Reassessing the Evidence for Universal School-age Bacillus Calmette Guerin (BCG) Vaccination in England and Wales

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# Introduction

percentage decrease in incidence rates resulted in an increase in the number of additional notifications prevented with 425 (95% IQR 336 to 519) notifications prevented in 2001 when the annual percentage decrease was assumed to be 1%. There was some evidence that the average annual number of notifications prevented was smaller when the annual percentage decrease was estimated using notifications (359 (95% IQR 284 to 440), P: 0.083) and using incidence rates (352 (95% IQR 102 to 1281), P: 0.083), compared to an assumed annual decrease of 1% (Figure 2). The estimated made using age-specific incidence rates in the white UK born in England again had a high degree of uncertainty. When an annual decrease of 1% was assumed the number of prevented notifications reduced with time with 368 (95% IQR 290 to 451) prevented in 2006, 288 (95% IQR 224 to 356) prevented in 2011, and 179 (95% IQR 132 to 231) prevented in 2016.

# Discussion

## Statement of primary findings

We found that the previously published method for estimating the impact of the BCG school’s scheme produced highly uncertain estimates of the impact of ending the scheme an all years evaluated when parameter uncertainty and measurement error were included. Updating the annual percentage decrease in TB notifications based on both the observed notifications in England and Wales and using age-specific incidence rates in the White UK born population in England resulted in an increased impact of ending universal school age vaccination in all years considered. These estimates were comparable to an average annual decline in incidence rates of 1%.

# References

# Supplementary Information

## Recreating the estimation model of Sutherland et al.

### Data sources

### Effects of stopping the schools BCG schools scheme