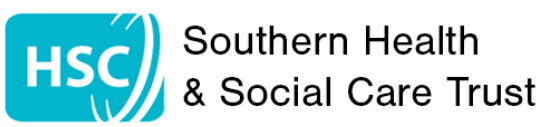


A RETROSPECTIVE REVIEW OF CHILDREN AND YOUNG PEOPLE WITH PERTUSSIS POSITIVE SWABS IN SOUTHERN HEALTH AND SOCIAL CARE TRUST FROM JANUARY 2024 TO AUGUST 2024

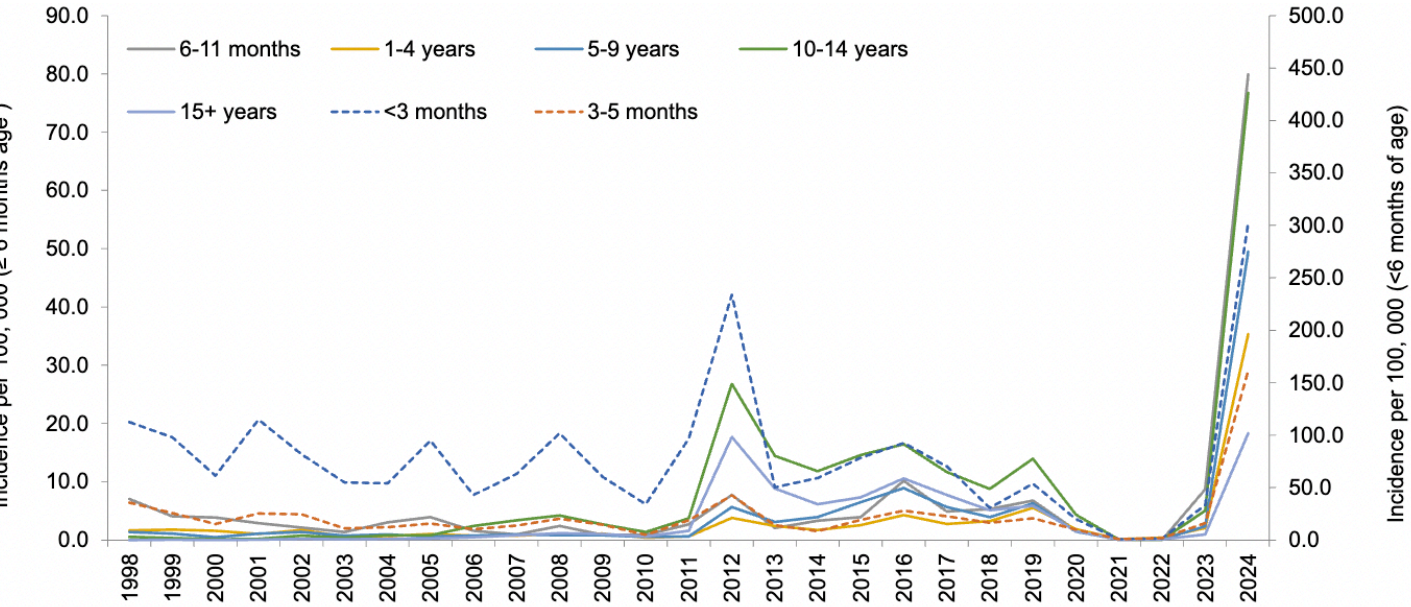


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Introduction

- Whooping cough is a highly infectious disease -Bordetella pertussis
- Part of the UK childhood immunisation schedule¹
- Offered to pregnant mothers from 16-32 weeks
- 2024 – sharp increase in cases particularly in under 3 months category²
- Focus on screening for evidence of malignant pertussis. Malignant pertussis often leads to multiple organ failure and has a mortality rate of 75% in infants³

Figure 1. Annual incidence by age group of laboratory-confirmed cases of pertussis in England: 2011 to 2024²

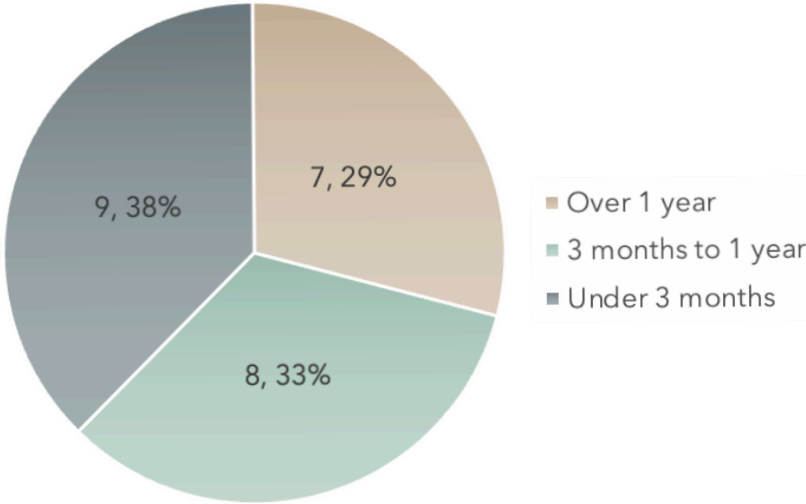


Methodology

- Obtained a list of positive pertussis swabs within the SHSCT from January 2024 to August 2024 from the regional virology lab
- Gathered data on patient demographics, immunisation status, presentation, investigations and managements
- Gathered qualitative data through interviews with 7 mothers whose infants presented under 3 months of age.

Figure 2. Age demographics of positive patients

Age demographics



Results

- 16/24 patients required hospital admission
- Length of stay 1-9 days
- Median stay between 1-2 days
- Presenting complaints included spasmodic cough, colour change and poor feeding
- 11 patients required blood tests, no patient had white cell counts of more than 30
- No patient required admission to ICU
- 3 patients required re-admissions due to ongoing spasmodic cough
- All children received the 1 in 6 vaccine at time of the study
- Of the 7 mothers of children under 3 months – 0 had the antenatal pertussis vaccine
- All 7 mothers would get the vaccine in future pregnancies

Conclusion

- Almost equal sex distribution
- Over half of the patients were under 1 year of age. 1/3 were under 3 months
- We saw no cases of malignant pertussis
- All infants under 3 months with pertussis were born to a mother who had not availed of the antenatal vaccine
- Vaccine hesitancy continues to be a challenge and health care professionals should promote vaccines as safe and effective

Figure 3: Length of admission for each patient

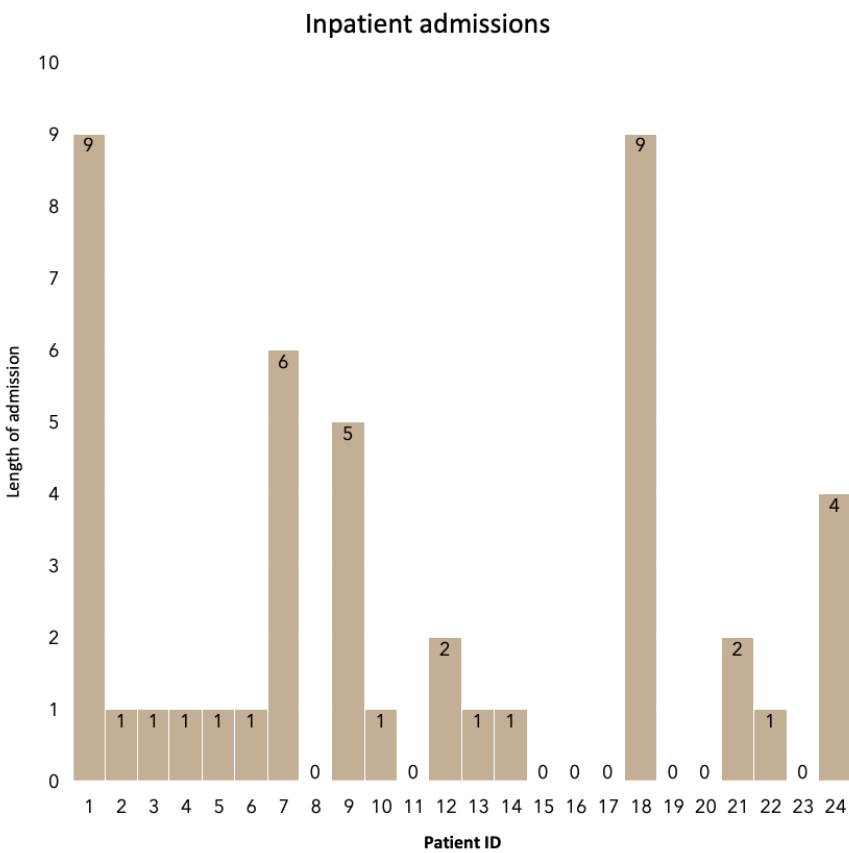
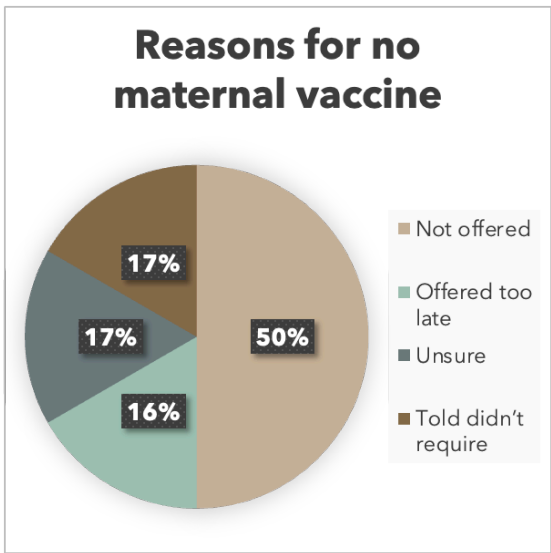


Figure 4 - Qualitative data on reasons for no antenatal vaccine



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2- Uk Health Security Agency (2024) Confirmed cases of pertussis in England by month, GOV.UK. Available at: <https://www.gov.uk/government/publications/pertussis-epidemiology-in-england-2024/confirmed-cases-of-pertussis-in-england-by-month>.

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