positive 12-23 month old children in BronchStart: 362 out of 1,468 (24.7%) admissions were in this age group. **Conclusion** We found that the 2021 summer lower respiratory tract infection peak in the UK and Ireland, although temporally disrupted and with an attenuated disease burden, predominantly affected younger age groups as in previous years. The overall lower burden of disease in 2021 suggests incomplete infection by RSV of its usual susceptible population, probably due to the effect of ongoing non-pharmaceutical interventions over the study time period, and raises the strong possibility of a further wave of infection in the coming months.

**668 SHOULD WE FORMALLY VERIFY THE TETANUS AND MMR VACCINATION STATUS OF ALL THOSE < 2 YEARS OF AGE ATTENDING THE PAEDIATRIC EMERGENCY DEPARTMENT?**

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Aims Vaccines are a great global health success. However, in the UK, populations remain vulnerable to vaccine-preventable diseases due to variable coverage. Recent data for Lancashire and Greater Manchester showed 93.3% of children had completed a primary course of tetanus vaccination and 90.2% had received a first dose of MMR (MMR1) by their second birthday.

Every year in England, millions of children and young people (CYP) attend Paediatric Emergency Departments (PED), with under-twins relatively over-represented. Many may have additional unmet health need (e.g. be under-immunised). The PED attendance therefore offers an opportunity to improve health beyond the reason for presentation and a pilot suggests that parents/carers are amenable to this.

This work is part of a larger project assessing sources of vaccination data and levels of unmet vaccination-related need in PED attendees. The aim of the component presented here was to explore the vaccination status of children under the age of two, with a focus on tetanus-containing vaccines and MMR1. Vaccination is important in the PED management of a tetanus-prone wound and MMR1 protects against measles and mumps, both of which cause outbreaks where vaccination is part of the control strategy.

**Methods** This cross-sectional observational study had a single data point for each participant attending the PED of a large district general in Greater Manchester in October 2021. Ethics approval was obtained to use an opt-out approach. A power calculation showed 577 participants were needed to detect a five percent difference between PED attendees and their peers. Vaccination data were extracted from individual electronic summary care records (SCR) (part of the primary care record visible to those in secondary care).

**Results** In the study period, 724 children under the age of two attended the PED. As first routine immunisations are offered at the age of two months, all those under this age were excluded (n = 116). SCRs were not available for a further 58 children, meaning 550 sets of data were included in the analysis.

At the time of attendance, 86.5% of children were up-to-date with tetanus-containing and MMR vaccination (where age-appropriate), when compared to the national schedule (tetanus at 2, 3, and 4 months; MMR around 12-13 months).

However, amongst those eligible to receive an MMR (over the age of 13 months; n = 284), this dropped to 81.7%. In this older age group, there were 17 children who had incomplete tetanus and no MMR1.

**Conclusion** Children under the age of two attending the PED appear to be no better vaccinated than their local peers and may have even lower coverage rates for MMR1. Ongoing work will look at coverage in older age groups.

An earlier part of this work demonstrated that parent/care recall of vaccination status should not be the only source of vaccination data during a consultation (due to its low specificity), suggesting vaccination status should be formally checked where possible e.g. via SCRs.

This population might benefit from an intervention to improve vaccination uptake, delivered in the PED and future work will seek to co-design one or more interventions.

**663 UTILISATION OF CHILDREN’S EMERGENCY CARE SERVICES DURING EPIDEMICS AND PANDEMICS: A SYSTEMATIC REVIEW**

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Aims Paediatric emergency departments (PED) around the world have reported a large decrease in the utilisation of emergency care services amongst children during the COVID-19 pandemic. This phenomenon has been observed during previous epidemics but the extent, trends or causes are not clear.

The aim of the study was To assess the impact of epidemics and pandemics on the utilisation of paediatric emergency care services to provide health policy advice.

**Methods** Searches were conducted of Medline, EMBASE, CINAHL, Scopus, Web of Science, and the Cochrane Library for studies (until 8th April 2021) that reported on changes in paediatric emergency care utilisation during epidemics. Two reviewers independently screened the results for inclusion. Data including study characteristics, PED visit data and other study findings were extracted. Quality assessment was completed using the National Institute for Health (NIH) quality assessment tool.

**Results** 131 articles were included within this review, 80% of which assessed the impact of COVID-19. Studies analysing COVID-19, SARS, MERS and Ebola found a reduction in PED visits whereas studies reporting on H1N1, Chikungunya Virus and an E coli outbreaks found an increase in PED visits. For COVID-19 there was a reduction of 63.86% (95% confidence interval 60.40% - 67.31%) with a range of -16.5% to -89.4%. Synthesis of results suggests that the fear of the epidemic disease, from either contracting it or its potential