known allergen and incorrect use of their autoinjector suggests a need to improve education. This project demonstrates that lack of trainee knowledge translates into clinical reality. We believe that improving trainee knowledge is vital in improving the management of anaphylaxis and as well as enabling doctors to educate patients and relatives.

REFERENCES

Aims Outbreaks of healthcare-associated infection (HCAI) in neonatal units (NNUs) have a significant burden of morbidity and mortality and cause substantial disruption and cost to neonatal networks. The number of NNU HCAI clusters in 2011 in England, their size and causative organisms, were estimated using currently available surveillance tools.

Methods Data derived from voluntary laboratory reporting (LabBase 2), national reference laboratories and a Health Protection Agency outbreak reporting tool (HFZone) were searched to identify potential NNU HCAI clusters. The analysis was limited to the most likely causative organisms (S. aureus, Enterobacter spp., E. coli, Acinetobacter spp., Klebsiella spp., Pseudomonas spp., Serratia spp.). Clusters were defined as: (i) any neonatal cluster or outbreak reported in HFZone; (ii) laboratory reports of at least 2 isolates originating from the same hospital and sharing the same VNTR or strain type, with at least one case below the age of 28 days, and with a maximum of 14 days between two cases, and (iii) 2 or more reports of the same infection in neonates in the same hospital in a 14 day period in LabBase. Cross-linkage of the 3 data sources was then attempted.

Results 116 neonatal clusters including both colonisation and invasive disease were identified, involving at least 666 neonates. 45.4% of the clusters were MRSA, followed by MSSA (26%), E. coli (13%), Enterobacter (12%), and Pseudomonas (10%). There were on average 9.2 neonatal clusters per month (range 0–14). The median number of babies per cluster was 5 (range 2–80). When only bacteriemia samples were considered, E. coli was the most common organism accounting for 57% of clusters. The study likely underestimates the number of clusters due to a lack of standardised reporting. It was not always possible to fully characterise the clusters as formal outbreaks due to data limitations.

Conclusion This analysis identified a high number of HCAI clusters in English NNUs. A standardised approach to the definition, reporting, management and surveillance of NNU HCAI outbreaks is required to enable reliable outbreak detection and appropriate action.

Aims Following the introduction of conjugate childhood vaccines and declining trends in meningococcal disease over the past decade, community-acquired serious invasive bacterial infections in children have become less common but hospital admissions continue to rise. The objective of this study was to estimate the incidence of serious culture-confirmed invasive bacterial infections in children within a geographically-defined population over a three-year period.

Methods Blood and cerebrospinal fluid culture (CSF) results for all children aged 1 month to 16 years admitted to five South-West London (SWL) and Surrey hospitals during 2009–11 were obtained at regular intervals from each hospital microbiology department and a web-based questionnaire completed for all children with a positive culture. Hospital-acquired infection was defined as a significant pathogen isolated from a blood/CSF culture taken >48 hours after hospital admission.

Results During 2009–11, 44,118 children had 46,039 admissions to one of the five Hospitals, equivalent to 25.8 admissions per 1,000 children resident in SWL and Surrey. Blood/CSF cultures were obtained during 44.7% (n = 20,578) of admissions and 7.4% (n = 1,550) had a positive culture. Of these, only 571 were defined as a clinically significant serious bacterial infection (SBI), equivalent to 37.3% of positive blood/CSF cultures, 2.8% of all blood/CSF cultures taken and 1.2% of all hospital admissions. The population incidence of SBI in SWL and Surrey was, therefore, 31.9/100,000, with the highest incidence among 1–11 month-olds (172/100,000), followed by 1–4 year-olds (343/100,000) and 5–15 year-olds (164/100,000). A third of the SBI (208/571, 36.4%), however, were hospital-acquired and, of the community-acquired infections, more than two-thirds (252/363, 69.4%) occurred in children with co-morbidities. The incidence of community-acquired SBI in previously healthy children in SWL and Surrey was, therefore, only 6.2/100,000, with the highest incidence among 1–11 month-olds (35.9/100,000), followed by 1–4 year-olds (6.5/100,000) and 5–15 year-olds (3.2/100,000).

Conclusions Although a SBI was suspected in almost half of all childhood hospital admissions in SWL and Surrey, a significant pathogen was identified in only 3%, mainly among children with pre-existing co-morbidities. Improved targeting of children at very low risk of a SBI at presentation will facilitate increased management of unv.

Aims The aim of this study was to estimate the prevalence and incidence of atopy in 5–16 year-olds attending a secondary school in two South West London boroughs.

Methods A retrospective study was carried out on 1,575 children attending a large secondary school in South West London.

Results The overall prevalence of atopy was 45.3% (95% CI 42.5–48.2). 31.1% of the children had at least one IgE mediated condition, 21.1% had skin symptoms only, and 14.1% of children had both skin and respiratory symptoms. There was a significant difference between boys and girls in the prevalence of atopy (50.4% vs 40.2%). Children with a personal history of asthma were more likely to have atopy. Children with a personal history of hay fever were more likely to have atopy than those children without a personal history of hay fever (45.9% vs 39.9%).

Conclusions The prevalence of atopy in this school was high and slightly higher than other studies. Boys and children with a personal history of asthma and hay fever were more likely to have atopy.