in 34 (41%) of the critically ill children and 51 (61.4%) patients needed mechanical ventilation (MV). Oseltamivir was used in 80 (96%) patients. During the study period, overall mortality rate was 13.7%, however, mortality rate was 30.1% (n=25) in children with pandemic influenza A (H1N1) 2009 (p=0.0016) in PICUs. Cause of death was primary H1N1 infection in 16 (64%), nosocomial infection in 4 (16%) and primary disease progression in 5 (20%) patients.

Conclusion: Severe disease and high mortality were seen in children with pandemic influenza (H1N1) 2009. Death occurred in all age groups of children with or without underlying illness.

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**CAUSES OF CHILDHOOD MORTALITY:
10 YEAR AUDIT OF POST MORTEM
EXAMINATIONS IN CUH TEMPLE STREET,
DUBLIN**

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Background: Despite the marked reduction in SIDS, the rate of childhood mortality has remained fairly constant. Many childhood deaths are unexpected and potentially avoidable.

Aim: To analyse data relating to all deaths in CUH, Temple Street, and to assess the feasibility of establishing a National Enquiry in order to identify avoidable factors in childhood death.

Methods: We conducted a retrospective review of all post mortems reported over ten years. Deaths were analysed and classified as follows: expected or unexpected; unavoidable, avoidable or potentially avoidable.

Results: 246 autopsies were studied. 78% were performed at the direction of a coroner. 11 deaths (4.5%) were referred to the State Pathologist. Deaths were categorised into the following groups; SIDS, (33.7%), infection (19.1%), neurological and metabolic disease (16.7%), injury/suicide (13.4%), cardiac (4.9%), miscellaneous (12.2%). A marked reduction in SIDS was noted reflecting national trends. Of the deaths attributed to accidental injury almost two thirds were in boys. All of these deaths were deemed potentially avoidable or avoidable.

Of the total number of deaths at least 48% were unexpected. Just over half the deaths undergoing post mortem were avoidable or potentially avoidable.

Conclusion: Our data highlights the reasons why children die in an Irish population. Our ability to assess all associated factors in detail was limited by the data available. Establishing a national enquiry into paediatric mortality would provide information to the avoidable factors associated with childhood deaths. This could inform institutional policies and public health measures to reduce the incidence of untimely and preventable deaths.

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**AN EVALUATION OF THE BURDEN OF
PREMATURE BIRTH ON A UNITED KINGDOM
REGIONAL PAEDIATRIC INTENSIVE CARE
SERVICE**

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Background and aims: Premature birth is increasing in frequency. Long term health complications can occur, some of which may require paediatric intensive care (PICU) support. This study aims to define the characteristics and resource requirements of the ex-preterm children under the age of 2 years within a regional PICU.

Methods: Comparisons were made between term born and ex-preterm children admitted to the PICU at Leeds Teaching Hospitals NHS Trust over a 1 year period in 2008.

Results: 471 admissions were children under 2 years of age with 98 being premature at birth. There were no significant differences in sex or age at presentation. Earlier gestational age at birth correlated with increasing chronological age at presentation to PICU (p< 0.001). Ex-preterm children have increased odds of presenting with a respiratory diagnosis (OR=5.12, 95%CI 3.13-8.34, p< 0.001) and decreased odds of a cardiovascular diagnosis (OR=0.41, 95%CI 0.25-0.66, p< 0.001). Ex-preterm children have lower odds of invasive ventilation (OR=0.32, 95%CI 0.12-0.89, p=0.047) but when necessary it is for longer (p=0.018). Ex-preterm children had lower odds of requiring inotropes (OR=0.47, 96%CI 0.29-0.75, p=0.002).