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.

1239

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

P. Fitzpatrick¹, J. Thorne², D. Devaney²,
A. Nicholson¹

¹Dept. of Paediatrics, ²Dept. of Pathology,
Childrens University Hospital, Dublin, Ireland

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.

1240

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

M.D. Christopherson¹, C. Penrose²

¹Paediatric Intensive Care, Alder Hey Children's
NHS Foundation Trust, Liverpool, ²Paediatric
Intensive Care, The Leeds Teaching Hospitals
NHS Trust, Leeds, UK

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).

Length of PICU admission was longer for ex-preterm children (median 4 days) than for those born at term (median 3 days, $p=0.007$).

Conclusions: Premature birth places a significant burden on PICU services. Expanding numbers of surviving premature infants combined with the longer length of admission and invasive ventilation requirement are factors to be considered when planning PICU provision to ensure the needs of all children are met.

1241

ANTENATAL STEROIDS IN CHORIOAMNIONITIS: FRIEND OR FOE? A NATIONWIDE SURVEY AMONG PERINATOLOGISTS

S. Lievense¹, B.W. Kramer¹, J.G. Nijhuis², L.J. Zimmermann¹, J.V. Been¹

¹Paediatrics, ²Obstetrics, Maastricht University Medical Centre, Maastricht, The Netherlands

Background: Administration of antenatal steroids improves neonatal outcome and is common practice in imminent preterm delivery. Available guidelines delineate chorioamnionitis as a contraindication for antenatal steroids. However, observational evidence suggests antenatal steroids to be safe and effective in chorioamnionitis. We explored perinatologists' opinions on this issue.

Design/Methods: A nationwide email-based survey consisting of four multiple choice questions was performed among all Dutch perinatologists ($n=116$).

Results: Fifty-nine perinatologists (51%) sent back a response. In a pregnant woman of 30 weeks gestation with preterm labour and clinical CA, only a minority would actively promote delivery by giving stimulants (9%) or performing a C-section (9%). Fifty-four percent would give antenatal steroids, even though many feel there is a lack of evidence on their efficacy (86%) and safety (50%) in CA. Giving steroids to a mother with clinical CA is considered potentially harmful to either the baby, the mother, or both by 38%. Finally, 64% of the respondents would favour a clinical trial on the efficacy and safety of antenatal steroids in preterm labour with clinical CA, although another 26% fear the potential risks for mother and child.

Conclusion: There is great diversity in perinatologists' opinions on the safety and efficacy

of antenatal steroids in preterm labour with clinical CA. The majority feel there is lack of evidence on the subject and favour an RCT addressing the issue.

1242

IMPACT OF PANDEMIC H1N1 VIRUS INFECTION IN AN PAEDIATRIC INTENSIVE CARE UNIT

S. Stabouli¹, A. Violaki¹, J. Dotis¹, M. Mitroudi¹, S. Kalamitsou¹, V. Kotsis², M. Kotsiou¹

¹Paediatric Intensive Care Unit, Hippokration General Hospital, Thessaloníki, ²3rd Department of Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece

Objective: To describe characteristics and outcomes of paediatric patients in a paediatric intensive care unit (PICU) during H1N1 pandemic.

Patients and methods: We included in the study 34 consecutive patients, admitted to the PICU from 01-11-2009 to 28-02-2010. Demographic data, symptoms, comorbid conditions, illness progression, treatments, and clinical outcomes were collected from all patients.

Results: 19 (55.9%) patients were male and 15 (44.1%) were female. 29.4% of the patients were positive for H1N1 by viral polymerase chain reaction (PCR) on endobronchial secretions. Subjects with H1N1 infection were older than children who were admitted to the paediatric intensive care unit for other causes (7.9 ± 5.1 years vs. 3.9 ± 3.7 years, $P<0.05$). Duration of intensive care stay and mechanical ventilation was longer in children with H1N1 infection (34.7 ± 28.7 vs. 11.8 ± 17.5 days, $P<0.05$ and 32.5 ± 27.7 vs. 10.3 ± 18.6 days, $P<0.05$, respectively). 80% of the children with H1N1 infection had known comorbid disorders compared to the 33.3% of the rest of the subjects ($P<0.05$). Children with H1N1 infection presented an increased complications rate (70% vs. 16.7%, $P<0.005$) and had 4.8 times increased likelihood to present complications compared with the children who were admitted to the paediatric intensive care unit for other causes. Mortality rate was higher in children with H1N1 infection, but the difference between the two groups was not statistically significant.

Conclusions: Critical illness from H1N1 infection in children who require admission to paediatric intensive care unit, was associated with increased complications rate, and prolonged duration of mechanical ventilation and hospitalization.