ventilation, 59% were not switched and 7% were started initially on volume targeted ventilation. 8.3% of neonates not switched to volume targeted ventilation had a documented reason for this. 28.6% of neonates changed to volume targeted ventilation were changed in accordance with our departmental guideline.

Conclusion This audit demonstrated poor compliance in switching suitable neonates to volume targeted ventilation. Those that are switched are rarely switched according to the guideline. There is inadequate documentation of the reason for not switching to volume targeted ventilation. These results emphasise the need for ongoing training and education on volume targeted ventilation for all neonatal staff to ensure that our neonates receive the optimum ventilatory care.

PO-0763 THE PREVALENCE AND OUTCOME OF BABIES WITH BRONCHOPULMONARY DYSPLASIA IN A UK TERTIARY NEONATAL UNIT

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Background Bronchopulmonary dysplasia (BPD) is one of the most important adverse sequelae of premature birth and the most common form of chronic lung disease of infancy. It is relevant in the current health care climate due to the health care costs it may generate owing to the long-term respiratory and neurodevelopmental complications.

Aims To understand the prevalence, characteristics and outcomes of BPD cases in a UK tertiary neonatal unit.

Methods The Badger neonatal database was analysed for BPD and cases included if they required oxygen at corrected gestational age of 36 weeks. Their outcome and impact on neonatal services were studied over the past 4 years, after categorisation into inborn and outborn babies.

Results In the last 4 years we had 5342 admissions to our neonatal unit, 159 of who had BPD. The results are as below:

Conclusion BPD is a major morbidity among preterm babies. The cases are increasing in number due to increasing survival of extremely preterm babies. The increasing demand for home oxygen and associated comorbidities in these babies have implications for paediatric community service teams.

Abstract PO-0763 Table 1

	Inborn	Outborn
N	81	78
Mean Gestational Age in weeks (range)	26	25
Mean Birth Weight in grams (range)	810	830
Male/ Female	45/36	44/34
Mean Ventilation Days (range)	22.8	27.3
Mean CPAP days (range)	37.8	38.6
Postnatal Steroid	26	15
Evidence of Pulmonary Hypertension	5	4
Total Deaths	6	2
Home oxygen	36	30
Average length of stay (days)	107	116

PO-0764 MATERNAL SMOKING AND THE RISK OF BRONCHOPULMONARY DYSPLASIA (BPD) IN THE VERY LOW BIRTH WEIGHT (VLBW) PRETERM INFANTS

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Background and aim Among other risk factors the intrauterine smoke exposure has been suggested to influence BPD development. The aim of the study was to analyse the prevalence of BPD as well as other related variables in a group of preterm infants born by smoking and non-smoking women.

Methods A retrospective analysis based on medical records was performed. Data of VLBW preterm newborns <32 weeks gestational age, born during one year and hospitalised in the neonatal intensive care unit of a tertiary perinatal centre were collected and statistically analysed using Mann-Whitney and Pearson's Chi-square tests.

Results Analysis included 185 newborns. Mothers admitted smoking in 22 cases (12%). Gestational age and birth weight were similar in both groups (28 vs 27.5 weeks and 1203 g vs 1108 g, $p > 0.05$). BPD prevalence did not differ significantly between both groups (36% vs 39%, $p > 0.05$). Among newborns in the smoking group there was a higher mortality (27% vs 18%, $p > 0.05$) but this was not statistically significant. There were no significant differences between groups in the need for surfactant therapy (36% vs 43%, $p > 0.05$) or the length of mechanical ventilation (mean 15.6 vs 12.9 days, $p > 0.05$).

Conclusion Smoking was not confirmed as a definite risk factor of BPD in this study. This may be due to the multifactorial pathogenesis of the disease but possibly also associated with the methodology that was based on mothers' declaration regarding smoking without a laboratory screening.

PO-0765 INTRODUCTION OF INSURE THERAPY – EXPERIENCES AND LIMITATIONS

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Background and aims Respiratory Distress Syndrome is the most frequent cause of respiratory insufficiency in premature infants. The essentials of INSURE therapy are INtubation after noticing the condition of RDS, SURfactant therapy and Extubation to non-invasive respiration. At our ward INSURE therapy was introduced in 2012.

Patients and methods We analysed our patients who received INSURE therapy during the 21-month-long period from July 1. 2012 until March 31. 2014. INSURE therapy was considered effective, if the patient did not require invasive ventilation within 1 week. During the examined period 398 patients were admitted to our 18-bed tertiary Neonatal Intensive Care Unit. INSURE therapy was applied in the case of 82 prematures (gestational age: 29 ± 3 weeks, birthweight 1358 ± 404 g; mean ±SD).

Results A surfactant (Curosurf ®) dose of 168 ± 39 mg/kg was administered. There was no need for repeated intubation in 57 cases, in 13 cases a second dose was surfactant was also