





Coventry, Solihull & Warwickshire Safeguarding Children Boards

# CHILD DEATH OVERVIEW PANELS

# ANNUAL REPORT

# 2015 - 2016

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1 The focus for 2015-2016 continued very much as in previous years by aiming to review cases in a timely manner, finalise outstanding areas of work, progressing actions arising from reviews and continually reviewing and improving the process as a whole. The learning relates to deaths reviewed between 01 April 2015 and 31 March 2016 and the statistical data relates to deaths notified during this same reporting year.

#### 2 Deaths reviewed by Child Death Overview Panels (CDOPs) during 2015-2016:

15 panels were held across the sub-region during 2015-2016 and 71 deaths were reviewed. Of the 71 deaths reviewed, 35 (49%) were identified as being preventable. The definition of 'preventable' is defined in Chapter 5 of Working Together to Safeguard Children (Reviewed 2015) as 'Those in which modifiable factors may have contributed to the death. These are factors defined as those, where, if actions could be taken through national or local interventions, the risk of future child deaths could be reduced". The breakdown for each LSCB is detailed in the table below:

LSCB	Panels held	Deaths Reviewed	Modifiable Factors
Coventry	5	24	12 (50%)
Solihull	4	16	06 (37%)
Warwickshire	6	31	17 (55%)
Total	15	71	35 (49%)

2.1 All of the Coventry and Solihull panels were full CDOPs. Warwickshire held 5 full CDOPs and 1 Fast Tack CDOP.

## 3 Recommendations and actions arising from Coventry CDOP during 2015-2016

**3.1** <u>**13**</u> actions were progressed from deaths reviewed during 2015-2016. The following is a summary of the learning identified and the actions initiated:

#### 3.2 Deaths with modifiable factors and actions identified:

3.3 Sudden Infant Death Syndrome (SIDS):

Coventry CDOP reviewed one death from SIDS where the death occurred in year 2013-2014. This death was subject of a serious case review. CDOP identified maternal smoking, poor parenting and poor home conditions as contributory factors. The serious case review identified good practice in how the joint agency investigation as per the Sudden and Unexpected Death in Children (SUDC) Protocol was conducted as well as good support provided by the Community Midwife, Health Visitor and GP. One of the recommendations made by the serious case review was for health professionals to physically check where baby is sleeping for both day and night time sleeps. CDOP endorsed the learning and recommendations from the serious case review and did not identify any further actions. Further work around SIDs is detailed in paragraph 8.5.

3.4 Death from a Non-Accidental Head Injury:

Coventry CDOP reviewed another death subject of a serious case review where death occurred in year 2013-2014. CDOP identified domestic abuse and poor parenting as contributory factors. Mother's partner was convicted of murder and Mother convicted for neglect. Both received terms of imprisonment. CDOP endorsed the learning and recommendations from the serious case review and did not identify any further actions.

#### 3.5 Misdiagnosis:

In the death of a young child who died from peritonitis, the child had been seen by three health professionals in the week prior to death with symptoms of vomiting and lethargy. A Root Cause Analysis conducted by the Trust concerned identified that the working diagnosis of constipation overlooked 'red flag' symptoms of abdominal distension and vomiting and the child should have been admitted for observations. CDOP acknowledged the thorough Root Cause Analysis

conducted and the learning identified which has been widely disseminated across the Trust; i.e. (i) Vomiting is a red flag symptom when considering the diagnosis of simple constipation in childhood. (ii) Vomiting and abdominal pain are not features of simple constipation. (iii) Fluid balance charts should be retained in the patient's case notes. It should also be acknowledged that notable practice was noted in the RCA review in that the documentation in the medical records was of a high standard; a junior doctor appropriately sought the advice of a more senior doctor who examined the child and a debrief policy for staff was implemented when the child died.

3.6 Death from Hypoxic Ischaemic Brain Injury following Cardiorespiratory Arrest - Cause Undetermined:

An infant who had suffered two previous life threatening events was found unresponsive at home. The infant was revived by hospital staff but died a few days later (year of death was 2012-2013). Despite an extensive investigation the cause of the final collapse could not be determined and at Inquest the Coroner recorded an 'Open' conclusion. Maternal smoking was found to be a contributory factor to the child's vulnerability. The CDOP review identified that parents had failed to attend two appointments for the infant's 6 week check-up citing they had moved out of the area so the records were filed as 'No Trace'. Enquiries with the Health Visiting Service confirmed that procedures to locate moving families have been tightened up since this death.

3.7 Consanguinity:

Coventry CDOP reviewed two deaths where both children died from complications of a life limiting neuro-degenerative disorder. In both deaths consanguinity was identified a contributory factor. In one review an older sibling had sadly died of the same condition. Further work has been conducted around consanguinity which is detailed in paragraph 7.1 to 7.4.

#### 3.8 Extreme Prematurity and Maternal Lifestyle Factors:

Coventry CDOP reviewed 5 neonatal deaths where a high maternal BMI and/or maternal smoking during pregnancy were identified as contributory factors.

3.8.1 In one death CDOP was made aware that a number of older siblings had all been removed into Local Authority Care. CDOP was informed that Coventry was contributing to research on birth mothers and repeat care proceedings being conducted by University of Manchester. This research has concluded and the final report was circulated to CDOP members. Following on from the findings of the research, Coventry has set up a two year scheme which provides intense multi-agency support to families that have had a previous child or children removed.

#### 3.9 Learning and actions identified in non-modifiable deaths:

#### 3.10 Contradictory Medication:

In the death of a child with Spinal Muscular Atrophy Respiratory Distress (SMARD) who died of acute pancreatitis, the treating out of area Paediatric Intensive Care Unit (PICU) started the child on a 14 day course of Meropenem (antibiotic). CDOP identified that this drug can be linked to pancreatitis in children but is also used to treat pancreatitis so contradictory. CDOP asked that liaison be made with the PICU Consultant treating the child to ascertain if the giving of Meropenem was considered as a potential issue and did they report this as a possible drug reaction.

#### 3.11 Communication issues:

In 3 deaths reviewed, one GP stated they had not been notified of the death by the hospital where death occurred and had to rely on information provided by the family. Another GP stated that information was received two months after the death and the third received verbal notification of the death but no details. Notification processes were clarified with the hospitals in question.

#### 3.12 Miscellaneous Actions:

Other actions were identified to; (i) check on the progress of surviving twins; (ii) ensure ongoing support for parent(s) identified as vulnerable (iii) enquire if incidents had been escalated and, (iv) in one case advised parents to write to the Health Ombudsmen when dissatisfied with a Trust's response.

# 3.13 Update from an action relating to Hypertensive Guidelines:

In the reporting year 2012-2013 Coventry CDOP reviewed the death of a full term baby who died shortly after birth due to oxygen deprivation. A Root Cause Analysis (RCA) was conducted by the Trust which accepted that Mother's antenatal care had not been managed well, i.e. no referral to an Obstetrician after several recordings of high blood pressure; the care pathway should have changed to a high risk Consultant led care pathway due to raised blood pressure and midwifery staff focused on pre-eclampsia. CDOP ascertained that the midwife did follow the Chronic Hypertension Guidance which exists for already diagnosed hypertension (high blood pressure) but there was no guidance in place for undiagnosed hypertension present at booking which was the case with this mother. CDOP requested that the guidelines be reviewed to incorporate guidance for undiagnosed hypertension. Following a long dialogue with the Trust CDOP was given assurance in August 2015 that the action relating to the hypertensive guidelines and the pathway for women who present in early pregnancy with previously undiagnosed hypertension is now resolved, with the following pathway in place: Any one presenting below 20 weeks with an abnormal blood pressure reading the Community Midwife will arrange an urgent antenatal clinic appointment for review by the Obstetrician and for a management plan of care.

## 3.14 Other:

CDOP reviewed the sudden death of a 17year old who was found unresponsive in bed. Despite a full investigation a cause of death could not be determined and was recorded by the Coroner as 'Unascertained'. No modifiable factors were identified and no actions arose from the review.

# 4 Recommendations and actions arising from Solihull CDOP during 2015-2016

**4.1** <u>**21**</u> actions were progressed from deaths reviewed during 2015-2016. The following is a summary of the learning identified and the actions initiated:

# 4.2 Deaths with modifiable factors and actions identified:

#### 4.3 Death from a Non-Accidental Injury:

Solihull CDOP reviewed the death of an infant who died from severe stomach injuries. Both parents were convicted of causing or allowing the child's death and both received terms of imprisonment. This death was also subject of a Serious Case Review. CDOP identified poor parenting, domestic abuse and substance abuse as contributory factors. CDOP endorsed the learning and recommendations of the serious case review and did not identify any additional actions.

#### 4.4 Sudden Death of a Child with Complex Medical Needs:

This child who had complex medical needs and a history of respiratory problems died from respiratory failure due to a lower respiratory tract infection after collapsing at home. The child had been seen by an 'out of hours' GP earlier that day who conducted a thorough examination but could not take an accurate reading to measure the child's oxygen saturations as they were in possession of an adult oxygen monitor and did not have a child's probe with them to use with this machine. CDOP concluded that an accurate reading may have prompted the GP to advise a hospital admission if oxygen readings were seen to be low and wrote to the Medical Director of the 'out of hours' GP service to recommend that 'out of ours' GPs carry child probes with them.

The Medical Director consulted with their 'out of hours' Clinical Management Group (CMG) and other external medical organisations which concluded that this was not viable as the risks and disadvantages would outweigh any possible advantages. The Medical Director did however inform CDOP that this will be kept under review and the CMG will revisit this issue and the whole scope of home visits to children later this year.

#### 4.5 Premature baby born at a Level 1 hospital:

Mother was admitted to a Level 1 hospital with limited neonatal facilities and gave birth there at 27 weeks gestation. Arrangements were made to transfer the baby to a specialist Level 3 Neonatal Unit within the same Trust however the baby could not be stabilised and died at the Level 3 Unit shortly after arrival. A Serious Untoward Investigation (SUI) was conducted by the Trust and following this a care pathway was developed whereby mothers under 34 weeks gestation are advised to attend the Level 3 Unit. This pathway was communicated to all patients and internal and external stakeholders in this service. CDOP also identified a high maternal BMI as a contributory factor in this review.

- 4.5.1 The CDOP review also identified that the health visitor had been notified of the birth but not the death so consequently made contact with the family to arrange the primary birth visit unaware that the baby had been born prematurely and had subsequently died. This was flagged to Child Health and processes changed to also include the gestational age so that health visitors can check with neonatal units on the progress of premature babies prior to making contact with parents.
- 4.5.2 The GP also notified CDOP that they had not received any formal notification of the death and had to rely on information provided by the family. Checks were conducted with the Trust concerned which identified that a telephone message had been left with the Practice receptionist to verbally notify the GP. The Trust now sends all notifications electronically to GPs.
- 4.6 Peri-Partum Hypoxia leading to Cardiorespiratory Arrest- Undetected SGA: This review relates to a baby born in an out of area Trust. Baby was born at full term by an emergency caesarean due to a deceleration in baby's heart rate. Mother's antenatal care was also booked at the same Trust which was Consultant led. Baby was born in a poor condition and did not respond to resuscitation. Baby's birth weight was on the 7.5th centile which may have been a contributory factor. The out of area Trust conducted a Root Cause Analysis which identified that baby was small for gestational age (SGA) and concluded that had Mother been referred for a growth scan at 37 weeks gestation when the Symphysis Fundal Height (measurement of the length of the womb) showed slow growth, SGA may have been detected and this may have altered the management plan for the remainder of the pregnancy. The RCA determined that all women should be referred for an ultrasound scan when the SFH measurement suggests no growth or slow growth from consecutive measurements and recommended that all midwifery and obstetric staff should have an annual update in GROW GAP training.
- 4.7 Extreme Prematurity and Maternal Lifestyle Factors:

CDOP reviewed 2 early neonatal deaths where maternal lifestyle factors were present. In one review maternal smoking, substance misuse and a high BMI were identified as contributory factors. Due to this mother's history and other information obtained the booking midwife made appropriate referrals to smoking cessation, the substance misuse midwife, healthy lifestyle and the health visitor. Safeguarding checks were also conducted with Children's Services. CDOP acknowledged this as good practice and conveyed this to the midwife concerned. The CDOP Chair also highlighted this good practice at the Maternity Local Implementation Group.

4.7.1 In the second review where baby was born prematurely due to placental abruption, CDOP identified maternal smoking during pregnancy as a contributory factor due to there being a clear

link between the two. CDOP was informed during the review that combined obstetric and neonatal mortality review meetings no longer took place at the Trust concerned and therefore a missed opportunity for shared learning. CDOP wrote to the Trust's Medical Director for Women and Children's Services who reassured CDOP that joint reviews do take place and provided the terms of reference.

# 4.8 Learning and actions identified in non-modifiable deaths:

4.9 Sudden and Unexpected Death - Missed Opportunity for a Multi-Agency Investigation: This review relates to a young child who collapsed unexpectedly at home and suffered a cardiac arrest in hospital. The admitting hospital did not instigate a multi-agency 'rapid response' investigation under the Sudden and Unexpected Death in Children (SUDC) Protocol which resulted in a delay in the police being notified and made subsequent information gathering more difficult and disjointed than it otherwise might have been. A coroner's investigation identified that the child died from a ruptured aortico-oesophageal fistula (considered likely to be due to erosion of a button battery but could not be proved). The learning was widely disseminated to paediatric staff by the Designated Doctor for Unexpected Deaths at the time and the SUDC protocol reiterated. CDOP wrote to the Designated Doctor following the review to note that the protocol had not been instigated but acknowledged the steps taken to share the learning and raise awareness.

#### 4.10 Unexpected Death – Delay in Notifying the Family of the Cause of Death:

A child with severe neurological and physical disabilities and prone to recurrent respiratory difficulties was found unresponsive at home. A 'rapid response' investigation under the Sudden and Unexpected Death in Children (SUDC) Protocol was instigated and the cause of death was found to be from a bacterial infection due to pneumonia. The paediatrician involved in the investigation requested the preliminary post mortem report from the Coroner but this was not released as the investigation was still ongoing. The lead paediatrician did not find out the cause of death for some time which resulted in a significant delay in the family being notified of their child's cause of death. Whilst CDOP acknowledged it is the Coroner's prerogative whether to release documents, CDOP enquired with other Coroners both regionally and wider and found that many Coroners do share the preliminary post mortem reports with the lead paediatrician. CDOP is aware that the West Midlands Multi-Agency SUDC Protocol is being revised as is the national SUDC protocol and will continue to keep this issue under review.

#### 4.11 Certification in expected deaths:

An infant diagnosed with Spinal Muscular Atrophy Type 1 and subject of an advanced care plan received their end of life care at home. Their community paediatrician issued the death certificate but informed CDOP that it would have been ideal if the GP had visited in the last 14 days prior to the death so the GP could have issued the death certificate and also provided support to the family. CDOP agreed that this would be good practice but did not feel it could realistically issue an effective message to GP's to promote the idea. CDOP did however raise this with the Community Children's Nursing Service Team Leader who agreed to manage this on a case by case basis and ensure that this is discussed as part of their initial and follow up communication with GPs when managing end of life care.

#### 4.12 Miscellaneous Actions:

Other actions were instigated to (i) obtain additional information from professionals on deferred cases (ii) raise awareness of the child death review process (iii) clarify internal procedures (iv) secure replacement representatives on the panel and (v) request updates on actions from internal investigations.

#### 4.13 Update on Serious Case Review Recommended by CDOP in 2015:

In the previous reporting year Solihull CDOP referred a death to Solihull Safeguarding Children

Board (SSCB) after the CDOP review concluded that neglect was a contributing factor. The Serious Case Review is underway with the aim to present it to SSCB in November 2016.

#### 4.14 *Other:*

CDOP reviewed the sudden death of an infant who was found unresponsive in bed. Despite a full investigation a cause of death could not be determined and was recorded by the Coroner as 'Unascertained'. No modifiable factors were identified and no actions arose from the review.

#### 5 Recommendations and actions arising from Warwickshire CDOP during 2015-2016

5.1 <u>38</u> actions were progressed from deaths reviewed during 2015-2016. The following is a summary of the learning identified and the actions initiated:

#### 5.2 Deaths with modifiable factors and actions identified:

#### 5.3 Sudden and Unexpected Death due to Post- Surgery Complications:

A 17 year old with complex medical conditions underwent a surgical procedure as an adult day patient to have a PEG (percutaneous endoscopic gastrostomy-feeding tube) inserted and died at home 3 days later from Aspiration Pneumonia due to a Paralytic Ileus (an intestinal blockage). A Root Cause Analysis (RCA) was conducted by the Trust and whilst CDOP acknowledged a thorough investigation, CDOP concluded that the root cause of this young person's death was not adequately addressed in the RCA. The CDOP review concluded that the root cause was that this young person failed to have an adequate pre-op assessment and post-surgical care in that had he remained an in-patient for 24 hours following surgery, observations for post-surgical problems including paralytic lleus would have been looked for and would have been detected sooner. The Trust responded that the RCA did identify the lack of robust assessment and consent process prior to the procedure which occurred due to the young person being referred directly to an Endoscopist rather than via the Nutrition Team for assessment. The Trust has ensured a more robust pathway so all patients booked for a PEG insertion have a formal and thorough assessment by the Nutrition Team first. The Trust stated that as complications manifested 36 hours after surgery this young person would have been at home even if kept in for 24 hours post operatively.

#### 5.4 Sudden and Unexpected Death from Acute Purulent Meningoencephalitis caused by Streptococcus Pneumonia:

This infant was seen by two different health professionals in the 48 hours prior to death, neither of who identified a very sick child. A Root Cause Analysis (RCA) identified that when seen by an 'out of hours' GP in a hospital setting on the first occasion, the child should have been monitored for longer and when seen by a community GP on the second occasion the management and assessment was poor. The Coroner at Inquest gave a 'Narrative' conclusion in that there were missed opportunities potentially to reveal the true nature of the underlying infection, which was difficult to diagnose in its prodromal phase ( i.e. between initial symptoms and the full development of the disease) but was satisfied that the care was not neglectful. Individual learning was identified and NICE guidance, which states a child presenting with a febrile convulsion should be referred to a Paediatric Unit for assessment, was widely shared with clinicians.

#### 5.5 Sudden Infant Death Syndrome (SIDS):

CDOP reviewed 2 deaths from SIDS. In the first case a 2 week old infant was placed between both parents in their bed for a cuddle with the intention of placing baby in their Moses basket, however both parents were tired and inadvertently fell asleep. The Coroner recorded an 'Open' conclusion at the Inquest as accidental airway obstruction was suspected but could not be proved. CDOP identified co-sleeping and parental smoking as contributory factors. Sadly the family had suffered a previous bereavement and actions were identified to ensure appropriate support was provided to the family. 5.6 In the second case, baby had been placed on their side to sleep in a Moses basket which contained excessive bedding. CDOP identified an unsafe sleeping position, excessive bedding, low birth weight, parental smoking and young parents as contributory factors. CDOP learned that the parents were eligible for the Family Nurse Partnership Programme (supporting vulnerable pregnant teenagers) which would have explored all of the concerns identified by CDOP but the programme was full so could not take them. CDOP wished to explore what the options are when the FNP Programme is full and was informed that the FNP is being expanded and therefore unlikely to happen again.

#### 5.7 Death from Road Traffic Collisions:

CDOP reviewed 2 deaths resulting from road traffic collisions. In the first case a young person travelling in the front passenger seat died after the driver pulled out in front of two cars that were racing each other. The young person did not know the driver, however accepted a lift from them. Following a criminal investigation the driver of the vehicle carrying the young person and the two racing drivers were convicted of causing death by dangerous driving and sentenced to terms of imprisonment. CDOP identified the young person who died to be a vulnerable teenager who was known to other agencies and determined that cannabis taken on the day further contributed to their vulnerability. Actions were identified to ascertain what support was provided to the young person by the agencies concerned. CDOP also felt it would be useful to forward the circumstances and this young person's history to the Child Sexual Exploitation Team for their general learning.

- 5.7.1 This review also highlighted a flaw in the national template for reviewing deaths (Form C) in that the 'Service Provision' domain is limited to health care only. CDOP considered this section should be expanded to include all services and this was fed back to Professor Jenny Kurinczuk who is leading on the national CDOP database development project.
- 5.8 In the second case an infant died after a parent who was driving the vehicle lost control after becoming distracted. The parent was subsequently convicted of causing the child's death by careless driving and given a community sentence. CDOP concluded that the parent becoming distracted was a contributory factor and wished to ensure that messages around distraction were being given. Warwickshire County Council Road Safety Education Team informed CDOP that driver distraction is one of the key messages they promote. It is included in various campaigns and also specifically on driver offending retraining programs when drivers have committed speeding offences or use of mobile phone whilst driving etc. CDOP also learned that the Royal Society for the Prevention of Accidents (RoSPA) website also contains specific advice on being distracted whilst driving which includes being distracted by children, eating, mobile phone use etc. It also contains a comprehensive distraction fact sheet.
- 5.9 It must be noted that in both reviews the police officer in the case or the senior police investigating officer attended the review which greatly assisted CDOP. Investigating officers are routinely invited to the reviews and their time is greatly appreciated by the panel.
- 5.10 Communication between Multi-Disciplinary Teams:

CDOP reviewed the death of a child with severe learning and physical disabilities who died from respiratory failure due to pneumonia. CDOP was informed that the child underwent spinal surgery in 2011 at an out of area specialist hospital and suffered post-operative respiratory problems resulting in a prolonged admission in intensive care. The lead paediatrician caring for the child locally was not made aware that the surgery was taking place so did not have opportunity to put plans in place to optimise the child's chest prior to the procedure. CDOP determined that the prolonged admission contributed to the child's vulnerability and felt this could have been avoided if communication had been made with the local multi -disciplinary team. CDOP wrote to the surgeon concerned and to the Chief Executive of the hospital. CDOP was informed by the hospital that multi-disciplinary working has moved on considerably since 2011.

#### 5.11 Consanguinity:

CDOP reviewed the death of a neonate who died from Congenital Lactic Acidosis, a recessive condition. Consanguinity (parents being blood relatives) was a contributory factor. No actions were identified.

#### 5.12 Neonatal Deaths and Access to Healthcare:

CDOP reviewed 2 cases where access to health care was a factor. In the first case a mother pregnant with twins and on a high risk care pathway was taken by ambulance to a Level 1 hospital where the twins were born prematurely at 24 weeks gestation an hour after arrival. Prior to arrival the ambulance crew had contracted the Level 1 hospital as this is where Mother's pregnancy was booked and was advised to bring Mother there. Unfortunately the twins were too unstable to transfer and died shortly after birth. CDOP concluded that access to appropriate healthcare was a contributory factor on the basis that Mother should have been taken straight to a Level 3 hospital with neonatal facilities where chances of survival would have been greater.

- 5.12.1 CDOP was aware that they had reviewed premature triplets in the previous year which identified a need for a Coventry and Warwickshire sub-regional care pathway for acute high risk pregnancies and elective/planned multiple births and at the time wrote to the Clinical Leads and Heads of Midwifery at the three Trusts. All three Trusts gave their support to this and CDOP was informed that this would be progressed by the recently reconvened Coventry and Warwickshire Maternity Network. Following this review CDOP wrote to the Trusts again to inform them of this review and requested an update on the care pathway. The letter was also sent to the Clinical Commissioning Groups (CCGs) for Coventry and Rugby; North Warwickshire and South Warwickshire as CDOP was mindful that this was a commissioning issue. A response was received in June 2016 from the Associate Director of Nursing, Women and Children/Head of Midwifery at University Hospitals Coventry and Warwickshire (UHCW) who confirmed that the Coventry and Warwickshire Maternity Network has been revised and at the last meeting work commenced on developing a more robust pathway to ensure that where possible extremely preterm births would be accepted at a Level 3 hospital. CDOP was also informed that a working party named Sustaining Transformation Plan (STP) has been developed across Coventry and Warwickshire to look at all maternity and children services and that work is currently underway to shape the future of the service. CDOP was informed that the Heads of Midwifery across the three Trusts work closely together to support maternity and neonatal services and will continue this work through the STP and the maternity network.
- 5.12.2 CDOP also wrote to the Head of Safeguarding at West Midlands Ambulance Service to advise of the learning and asked that in the absence of a protocol that ambulance staff consider taking expectant mothers in this situation directly to a Level 3 hospital instead of ringing the booking hospital and relying on their advice. CDOP did appreciate however that the safety of mother and baby is paramount and that there will be situations where they will need to be taken to the nearest hospital. The Head of Safeguarding responded to say that this has been raised with the Director and will be discussed at their next Clinical Steering Group, however it may be more of a commissioning/pathways issue which WMAS would have no steer on.
- 5.12.3 CDOP also learned that domestic abuse was a factor in this review and incidents had been reported during Mother's pregnancy. CDOP learned that Children's Social Care and Health Visiting Service were notified of the incidents but not Community Midwifery. The domestic abuse risk assessment level was recorded as 'standard' on two of the incidents and therefore two letters were sent to Mother. CDOP was of the view that the risk assessment focused on Mother and not the unborn twins and sought reassurance from the Operations Manager of the newly formed Multi-Agency Safeguarding Hub (MASH) that the new arrangements will ensure effective information sharing. The Operations Manager is confident that with the training staff have completed and processes in place, the MASH will ensure the risk in domestic abuse incidents

considers the risk to the children and not just to the parent. CDOP was disappointed to learn that a health representative has not yet been appointed to the MASH but is aware that this is being progressed by Warwickshire Safeguarding Children Board.

5.13 In the second case, a mother at 24 weeks gestation with a twin pregnancy contacted the Level 1 hospital where her pregnancy was booked and was advised to attend. Mother subsequently gave birth three and half hours after her arrival. One twin sadly died shortly after birth. The other twin was transferred to a Level 3 hospital but also sadly succumbed to complications relating to their prematurity. CDOP concluded that it was right for Mother to be assessed at the Level 1 hospital to ascertain the cause of her pain, however once it was apparent that Mother was in labour the Level 1 hospital was not the appropriate place for delivery and Mother should have been transferred in-utero to a Level 3 hospital. CDOP was aware that other Trusts have a 'rapid response' service where a Paediatrician and Nurse with neonatal resuscitation experience are called and attend to assist with the management of a neonate born at a Level 1 hospital and CDOP concluded that UHCW should consider this service. CDOP wrote to the Trust with this proposal and copied the letter to the Clinical Commissioning Groups for Coventry and Rugby; North Warwickshire and South Warwickshire as CDOP was mindful that this was a commissioning issue. In June 2016 a response was received from the Associate Director of Nursing Women and Children / Head of Midwifery at UHCW, who stated that at present, this would not be an option for UHCW to consider.

#### 5.14 Extreme Prematurity and Maternal Lifestyle Factors:

CDOP reviewed 4 early neonatal deaths where a raised BMI and/or maternal smoking during pregnancy were contributory factors. Feedback was given to Midwifery Services to elaborate on information when lifestyle factors were indicated at the antenatal booking, e.g. if a question relating to substance abuse or mental health is ticked 'yes' to explore further and document the information.

#### 5.15 Extreme Prematurity and In-Utero Transfers:

CDOP reviewed the death of a twin born at 25 weeks gestation and identified that being a twin and conceived by assisted conception contributed to Mother going into premature labour and baby's vulnerability. Mother was admitted to a Level 1 hospital and CDOP noted that 9 hospitals with neonatal intensive care facilities were contacted (both regionally and wider) to arrange an in-utero transfer however either no cots were available or there were cots but no capacity to accept Mother on the labour ward. CDOP concluded that this did not contribute to the baby's demise but was concerned to learn that staff have to make 2 separate telephone calls to each hospital to the neonatal unit and labour ward to check capacity. CDOP was made aware that NHS England was conducting a West Midlands Neonatal Service Review. CDOP wrote to the review lead who informed CDOP that the neonatal review does not currently cover labour ward capacity and the impact that has on delivering baby in the right place but they would be happy to consider this as the project develops. CDOP was also informed that as of 1st July 2016 there will be a one number service for maternity, paediatrics and neonatal services and this development will mean that clinicians will be able to assess bed and cot availability with one phone call. There will also be the availability for clinician to clinician conversation and for the first time in the West Midlands there will be data on the movement from Trust to Trust of pregnant woman which should improve the flow and some of the capacity issues.

#### 5.16 Miscellaneous Actions:

These included (i) follow up enquiries with schools to check on the wellbeing of bereaved siblings (ii) follow up enquiries with agencies to ensure appropriate support is being provided to bereaved parents (iii) requests for additional information or to clarify information from professionals when reviews have been deferred (iv) to check progress on actions from RCAs and other internal reviews and (v) raise awareness of the child death review process with all Warwickshire schools.

#### 5.17 Deaths with no modifiable factors but actions identified:

#### 5.18 Low Maternal BMI:

Mother was admitted by ambulance with abdominal pains and gave birth spontaneously at 24 week's gestation shortly after arrival. No contributory factors were identified but CDOP noted that Mother was a teenager with a BMI of 18 and queried whether she should have been on a Consultant led care pathway due to both factors. Enquiries were made with the Trust concerned which stated that at the time their policy was to refer for a BMI < 18 and to refer teenagers under 16 years of age so this mother would not have been referred. However mothers aged 17 years and younger are now referred to the Teenage Pregnancy Midwives (there are 2 in post) who see all teenage pregnant mums up to 20 years of age.

#### 5.19 Neonatal Death and Parental Choice:

In the death of a full term baby due to oxygen deprivation; parents repeatedly declined the advice of doctors to proceed to an emergency caesarean section as their wish was for a natural delivery. The Trust escalated the situation appropriately and no modifiable factors were identified. The Trust conducted a Root Cause Analysis and highlighted 'the education of women requesting low risk care pathways surrounding deviation as the normal' as a service delivery problem. CDOP recognised the importance of risk discussions taking place antenatally in these situations and asked the Trust what processes had been put in place. The Trust responded that they have ensured that documentation of risk of fetal death where Medical and Midwifery staff are concerned about the fetal wellbeing is undertaken which will hopefully emphasise the medical/midwifery concern to the parent(s). The Trust recognised that avoiding a future similar event in the absence of consent would be difficult as without consent they cannot act however concerned, but put in context most women/parents accept and follow advice if there are concerns about fetal wellbeing and this type of case is very rare.

#### 5.20 Sudden and Unexpected Death from Meningitis:

This child was attending full time nursery when they sadly took ill very quickly one evening. The parents contacted the nursery which acted promptly and followed correct procedures by making the relevant notifications, informing parents and sterilising the nursery. CDOP also acknowledged and commended the prompt action taken by the hospital where the child presented; from the timely triage, admittance and prescription of antibiotics despite unspecific symptoms. CDOP wrote to the Nursery and to the Medical Director at the Trust concerned to acknowledge their actions.

- 5.20.1 CDOP noted that the nursery spoke to Warwickshire Public Health who put them in touch with the Health Protection Agency (HPA). At the time of this contact the child was still being treated and Warwickshire Public Health was not made aware that the child had subsequently died in an out of area hospital where the child had been transferred for intensive care. CDOP therefore asked how the communication between Nursery, Public Health and HPA had been managed and sought reassurance from Public Health England that they have the right care pathways and notification systems in place particularly when a death/incident crosses borders.
- 5.21 Miscellaneous Actions:
- 5.22 In the death of a child with complex medical needs who died suddenly from epilepsy; CDOP noted that a referral for support had been made to the Integrated Disability Service 5 months prior to death but contact with the family had not taken place. It was not clear from the records as to why but this was flagged to the Operations Manager regarding appropriate practice.
- 5.23 Enquiries were made to ensure support for bereaved parents.

#### 5.24 Other:

CDOP reviewed a death due to Sudden Infant Death Syndrome (SIDS) where baby was placed correctly to sleep in its own cot and on its back. No modifiable factors were identified and no actions arose from the review.

#### Generic themes identified in the categories of deaths reviewed during 2015-2016

#### 6 Neonatal deaths:

As in previous years, neonatal deaths were the highest category of deaths reviewed during 2015-2016, across all 3 CDOPS, accounting for **42%** (**30 out of 71**) of the total reviewed. This mirrors the ratio for 2014-2015 where 43% (**36** out of **84**) were reviewed. Of the **30** deaths reviewed during 2015-2016, modifiable factors were identified in 60% (**18 out of 30**). This ratio has steadily increased over the last 4 years; i.e. **31%** in **2012-2013**; **39%** in **2013-2014**; and **44%** in **2014-2015**.

- 6.1 Of the **18** neonatal deaths reviewed where modifiable factors were identified, maternal lifestyle factors were contributory in **11** cases identifying one or more of the following; a high maternal body mass index (BMI), maternal smoking during pregnancy and substance misuse. In 2 cases maternal obstetric or physical history was an additional contributory factor. In the other **7** deaths reviewed, access to health care (3); service provision (2) and prior medical intervention (2) were modifiable factors as outlined in paragraphs 4.5, 4.6, 5.12, and 5.13.
- 6.2 This learning reflects the findings of the previous three reporting years where the majority of modifiable factors in deaths from extreme prematurity are linked to lifestyle choices as opposed to service provision. One reason which may explain the shift is that CDOPs have become more aware over the years of the links between smoking, high BMI and premature labour whereas at the start of the process these were not always identified as modifiable factors.
- 6.3 When lifestyle factors are contributory, CDOPs will look at whether appropriate referrals were made to smoking cessation, healthy eating programmes or the substance abuse midwife. Reference was made in the 2014-2015 annual report that Solihull wished to provide a referral obesity service similar to the 'Lighten Up' service provided in Birmingham. This has remained on the CDOP action plan to monitor and in March 2016 Solihull CDOP was informed that a new provider 'Gateway' which also provides the 'Lighten Up' service in Birmingham can refer pregnant women with a BMI up to 35 to healthy eating programmes. Pregnant women with a BMI >35 will continue to be referred for Obstetric led care as is current practice.
- 6.4 CDOPs acknowledge the continued co-operation of all Trusts, regionally and wider, for providing CDOPs with their RCA/SUI reports and action plans so that all learning can be captured and disseminated appropriately.

#### 7 Chromosomal, Genetic and Congenital Anomalies:

**15** deaths reviewed during 2015-2016 were classified under this category. Modifiable factors were identified in **4** (27%) deaths, 3 due to consanguinity and one where smoking and a high BMI were contributory factors; paragraphs 3.7, 3.8 and 5.11 refer. The remaining **11** (73%) were congenital defects diagnosed during the antenatal period or shortly after birth, with death occurring within the neonatal period or within the first year of life. In these deaths no modifiable factors were identified but actions arose from some of the reviews as outlined in paragraphs 3.10, 4.11 and 5.23.

#### 7.1 Consanguinity

Since the start of the process in April 2008 there have been **23** deaths reviewed where parents are consanguineous (i.e. blood related and usually first or second cousins) with 40% of Pakistani origin. Coventry CDOP has reviewed **18** and Warwickshire CDOP has reviewed **5**.

Of the **23** reviews, **14** (61%) were identified as being modifiable due to consanguinity (**10** in Coventry and **4** in Warwickshire).

- 7.2 In addition to the above, Solihull CDOP reviewed a death where the post mortem examination suggested an autosomal recessive disease but as the panel could not ascertain with any certainty if parents were consanguineous, it has not been included in the statistics. Likewise Warwickshire CDOP reviewed the death of a child from complications relating to a severe autosomal recessive metabolic disease however as parents were noted to be distantly related, consanguinity was not recorded as factor and has not been included in these statistics.
- 7.3 There is still a lot of debate across the country as to whether consanguinity should be regarded as a modifiable factor and there are varying views. Our sub-regional approach has always been that if medical information indicates that parents are consanguineous and both have an autosomal recessive gene which increases the risk of the genetic disorder the child has, then this will be regarded as a contributable and modifiable factor .In the case where a child of consanguineous parents dies of an unrelated cause then this will be regarded as non-modifiable. Hence the reason why there are some deaths identified as modifiable and others not.
- 7.4 Due to the number of deaths reviewed by Coventry CDOP, Dr Helen Green, seconded to Coventry Public Health, completed a detailed epidemiology study and presented her findings to the Coventry LSCB Business Management meeting, which agreed that it was appropriate to forward Dr Green's work to the Health and Inequalities Sub-Group of the Coventry Health and Wellbeing Board which was already conducting work around diversity and inequality.

#### 8 Sudden and Unexpected Deaths of Children (SUDC):

**20** sudden and unexpected deaths were reviewed during 2015-2016 (Coventry = 6, Solihull =. 5, Warwickshire = 9). Modifiable factors were identified in **12** (60%) of the deaths reviewed.

A breakdown of the type or cause of death is as follows:

- 9 = Medical cause of death ascertained (*paragraphs* 3.5, 3.10, 4.4, 4.9, 4.10, 5.3, 5.4, 5.20, 5.22)
- 4 = Sudden Infant Death Syndrome (*paragraphs* 3.3 5.5, 5.6, 5.24)
- 3 = Deaths of children where the cause of death could not be ascertained despite a full investigation (*paragraph 3.6, 3.14, 4.14*)
- 2 = Deaths from trauma due to non-accidental injuries (*paragraphs 3.4, 4.3*)
- 2 = Deaths from Road Traffic Collisions (*paragraphs 5.7, 5.8*)
- 8.1 'Rapid Response' Investigations as per the Sudden and Unexpected Deaths in Children (SUDC) Protocol in relation to deaths reviewed during 2015-2016:
- 8.1.1 The elements of a 'Rapid Response' investigation are outlined in Appendix 'D'.
- 8.1.2 <u>Coventry:</u>

Of the **6** sudden and unexpected deaths, **4** were subject of a 'Rapid Response' investigation. (**1** death occurred in hospital where a medical cause of death was ascertained and a death certificate issued and **1** death was a criminal investigation from the outset). Of the **4** deaths subject of the protocol, the protocol was complied with in full in **3** deaths. In the remaining **1** death all of the protocol was complied with, with the exception of convening the final multi-agency case discussion. It is known historically that Coventry paediatricians do

try and convene the final meeting but have difficulty on occasions in getting professionals to attend.

# 8.1.3 Solihull:

All **5** deaths were subject of a 'Rapid Response' investigation. Of the 5 deaths, **2** complied in full with the SUDC Protocol. In **1** death the police conducted a single agency visit to the home address following a discussion with the Designated Doctor for Sudden and Unexpected Deaths where it was agreed that a joint home visit was not required. The Designated Doctor convened the multi-agency information sharing meeting the following day and led the investigation until the Coroner was satisfied a death certificate could be issued without further investigation (*paragraph 4.4 refers*). In **1** death all of the protocol was complied with, with the exception of convening the final multi-agency case discussion as there was a delay in receiving the final post mortem examination and cause of death from the Coroner (*paragraph 4.10 refers*). In **1** death the receiving hospital did not instigate the 'rapid response' at all which caused delays and some difficulties but was picked up the following day (*paragraph 4.9 refers*).

# 8.1.4 Warwickshire:

Of the **9** sudden and unexpected deaths, **6** were subject of a 'Rapid Response' Investigation. (The **2** deaths from road traffic collisions were police investigations conducted on behalf of the Coroner and **1** death occurred in hospital where a medical cause of death was ascertained and a death certificate issued). Of the **6** deaths subject of the protocol **3** fully complied with the protocol (2 involved Paediatricians from UHCW and 1 from SWFT). In **1** all of the protocol was complied with, with the exception of convening the final multi-agency case discussion (*paragraph 5.22 refers*) and with the other **2** there was partial compliance, i.e. in **1** death the young person was taken straight to the mortuary so no samples were taken and there was a delay in notifying the police and paediatrician, although once involved an information sharing meeting and joint home visit took place (although no final case discussion meeting was held) (*paragraph 5.3 refers*). In the other where the child died on a Sunday the police conducted a single agency home visit as there was not a paediatrician available and a final case discussion meeting was not held (*paragraph 5.24 refers*)

# 8.2 Review of Solihull's Sudden and Unexpected Deaths:

In 2015 the CDOP Manager conducted an audit of Warwickshire's sudden and unexpected deaths and compliance with the SUDC Protocol and will be conducting a similar audit for Solihull in 2016. The audit will be conducted on unexpected deaths occurring in a 6 month period from September 2015 to March 2016 and second audit will be carried out on deaths occurring between September 2016 and March 2017, so comparisons can be made.

#### 8.3 West Midlands 'Rapid Response' Audit:

The West Midlands Regional CDOP/SUDC network was re-established in January 2016 and one of the first actions was to conduct an audit on 'rapid response' arrangements across the West Midlands. The findings show a huge variance across the region. The audit has now been expanded to include how unexpected deaths of older children i.e. 16 and 17 year olds are investigated as some CDOPs (including our own) have found that when older children are received and treated in adult A&E, adult A&E staff are not always familiar with the SUDC process and there is either a delay in instigating the multi-agency rapid response investigation or they 'slip through the net' altogether. However it must be noted that when this has occurred in our sub-region the Designated Doctors for Unexpected Deaths have always raised awareness of the SUDC Protocol with medical staff in acute adult services.

- 8.4 SUDC Protocols:
- 8.4.1 Warwickshire revised its protocol in January 2016 and it is published on the Warwickshire Safeguarding Children Board website.

- 8.4.2 The West Midlands SUDC Protocol (covering Coventry and Solihull and the metropolitan area only) is currently being revised. The West Midlands Regional CDOP/SUDC Network (which includes Staffordshire, Herefordshire, Worcestershire and Shropshire/Telford/Wrekin) has recommended a regional protocol to promote consistency across the wider West Midlands region and address cross border issues.
- 8.4.3. A working group with representatives from the Royal College of Paediatrics and Child Health and the Royal College of Pathologists, chaired by Baroness Kennedy has revised the national protocol which is currently out for consultation. It should be noted that the national protocol uses the term 'joint agency approach' which is a more accurate description than 'rapid response' and this term will no doubt be used in the future when protocols are reviewed.
- 8.5 Sudden Infant Death Syndrome (SIDS)
  4 deaths categorised as SIDS were reviewed during 2015-2016. Modifiable factors were identified in 3 deaths, where an unsafe sleeping environment and/or parental smoking or home conditions were identified as contributable factors, as outlined in paragraphs 3.3, 5.5, 5.6.
- 8.5.1 A total of **39** SIDS deaths have been reviewed across the sub-region to date, from April 2008 to March 2016 (**17** Coventry, **19** Warwickshire and **3** Solihull CDOP). Of the **39**, **35** (90%) were preventable with modifiable factors being identified. It is known that in **24** (62%) of deaths, parent(s) were given clear safe sleeping advice by a health professional which was not followed. That's not to say that advice wasn't given in the other deaths but that it could not be verified by the information provided for the review. In many of the deaths, parent(s) were considered to be vulnerable and/or leading chaotic lifestyles.
- 8.5.2 The above information only relates to the deaths that have been reviewed at CDOP so far. Further deaths did occur in 2015-2016 which indicate characteristics of SIDS but are still being investigated.
- 8.5.3 The previous annual report makes reference to the development of a SIDS risk assessment tool, to be bound in the Personal Child Health Record (red book). The risk assessment became part of the PCHR in December 2015 and came into use as soon as old stocks were depleted. The assessment includes a physical check of where baby sleeps (both night and day time) and if any risk(s) are identified, a plan will be agreed with parent(s) to reduce the risks. The Health Visitor will then review the assessment at the primary birth visit and any other professionals involved with the family will also be made aware of any risks so that safe sleeping messages are reinforced at every contact. Trusts have been requested to conduct an audit in Autumn 2016 to assess compliance with completing the risk assessment. It is pleasing to note that UHCW has completed their audit which records 100% compliance by midwives. The responsibility for monitoring and the progress of audits has now moved to Warwickshire Safeguarding Children Board and is on their performance action plan and therefore closed as a CDOP action.

#### 9 Chronic Medical Condition:

**5** deaths were reviewed during 2015-2016 which fell in this category and all died from their chronic condition or a medical cause associated with it. **2** reviews identified modifiable factors in relation to service provision as outlined in paragraphs 4.4 and 5.10. **1** review did not identify any modifiable factors but identified actions (unrelated to the death) as outlined in paragraph 4.10. The remaining **2** did not identify any modifiable factors or actions.

#### 10 Acute medical or surgical condition:

**4** deaths were reviewed during 2015-2016. Due to the sudden onset **3** were investigated as sudden and unexpected deaths as the cause of their demise was not apparent, as outlined in paragraphs 3.5, 5.3 and 5.22. In **1** the cause of death was established following investigations as an inpatient and a death certificate issued as outlined in paragraph 3.10.

- 10.1 Modifiable factors were identified in **2** deaths both under the domain of service provision, i.e. prior medical intervention in one (see paragraph 3.5) and access to health care in the other (paragraph 5.3 refers). In the remaining **2** deaths no modifiable factors were identified but there were actions (paragraphs 3.10 and 5.22 refer).
- 10.2 30 deaths classified under this category have been reviewed between 01.04.08 and 31.03.16 (the 4 referred to above are included in this figure). Modifiable factors were identified in 11 (37%) with 7 out of the 11 relating to medical service provision, i.e. misdiagnosis, poor assessment, not escalating to a senior colleague, no PICU bed available and in one case of infantile rickets due to vitamin D deficiency, not providing Mother with vitamin D supplements in pregnancy.
- 10.2.1 Access to health care features in the other **4** modifiable deaths which in **3**, relates to parent(s) delaying medical treatment, not realising how seriously ill their child was and the 4th relates to a young person with a history of poor diabetic control, not accessing appropriate health care.

#### 11 Trauma and other External Factors:

**3** deaths were reviewed during 2015-2016 which were classified under this category. **2** were as a result of road traffic collisions as outlined in paragraphs 5.7 and 5.8. The 3rd from suspected button battery ingestion is referred to in paragraph 4.9.

#### 11.1 Deaths from Road Traffic Collisions:

**31** deaths have resulted from road traffic collisions since the start of the process from 01.04.08 to 31.03.16. **26** have been reviewed to date and it is anticipated that most, if not all, will be reviewed during 2015-2016. In terms of where the collisions took place, there are no geographical 'hotspots' identified. A breakdown of ages is outlined in paragraph 24.6. As can be seen, over half, **16** out of **31**(52%) that died were in the 15-17 year age group. In this age group **6** were drivers/riders, **6** were passengers in a vehicle or on a motorcycle and **4** were pedestrians. Of the driver/riders, **5** were inexperienced drivers, who had recently passed their test and sadly lost their lives through driver error. All **6** passengers died as a result of driver error with **5** being in the same vehicle as the driver who caused the error. With regards to the pedestrians, **3** had placed themselves in danger by walking out in front of traffic and/or wearing dark clothing in an unlit road. The 4<sup>th</sup> death has yet to be reviewed so the full circumstances are not yet known. Consumption of alcohol and cannabis featured in **3** of the deaths in this age group in both drivers and pedestrians.

11.2 Solihull and Warwickshire CDOPs who have reviewed the deaths in relation to the inexperienced drivers have sought to ascertain how driving test centres engage new drivers and what literature is provided but recognised that they are limited as to what they can recommend locally as this is a national issue. CDOPs are aware that the Government is conducting some work in this area with one consideration being to increase the age limit to 18 years.

#### 12 Malignancy:

**3** deaths were reviewed during 2015-2016, none of which had modifiable factors identified. One action was identified to advise the parents to write to the Health Ombudsman (referred to in paragraph 3.12) as they were not satisfied with how their complaint had been dealt with by the hospital concerned. In all 3 deaths prompt referrals were made by the GP and in 2 cases where end of life care was provided at home, CDOP noted the excellent multi-agency palliative care provided.

#### 13 Infection:

**2** deaths were reviewed during 2015-2016. Modifiable factors were identified in one as outlined in paragraph 5.4. Good practice was identified in the other review as outlined in paragraph 5.20.

#### 14 Deliberately Inflicted Injury:

**2** deaths were reviewed which were both subject of Serious Case Reviews, as outlined in paragraphs 3.4 and 4.3.

#### 15 Serious Case Reviews:

**3** deaths subject of Serious Case Reviews (SCR) were reviewed during 2015-2016 as outlined in paragraphs 3.3, 3.4 and 4.3. In relation to the SCR recommended by Solihull CDOP in 2014-2015, this is ongoing as referred to in paragraph 4.13.

- 15.1 Coventry CDOP has reviewed **2** deaths subject of SCRs in this current year 2016-2017 which will be reported on in next year's annual report. Warwickshire CDOP will also be reviewing a death subject of an SCR within this reporting year.
- **16** Additional information on the deaths reviewed where modifiable factors were identified: Of the **35** deaths reviewed during 2015-2016 where modifiable factors were identified, the following information provides a breakdown with regards to age, gender, ethnicity, category of death and place where events leading to death occurred.

#### 16.1 Age:

**21** were 0-27 days, **4** were 28-364 days, **5** were 1-4 years, **1** was 1-9 years, **1** was 10-14 years and **3** were15-17 years. This mirrors the findings of deaths reviewed over the last two reporting years where the 0-27 day age group is the highest, accounting for 60% of the total of modifiable deaths.

#### 16.2 Gender:

**28** were male and **7** were female, which is a large shift compared to the previous two reporting years where there was only a slight difference in gender (**17** male and **15** female in 2014-2015 and **15** male **14** female in 2013-2014).

#### 16.3 Ethnicity:

**26** were White British, **5** were of Asian origin and **3** from a mixed ethnicity, which mirrors the ratio in the last two reporting years. (The remaining 1 cannot be categorised due to being a single number). With regards to the cause of death in children of minority ethnic origin, Consanguinity was identified as a modifiable factor in 3 deaths. In the other deaths there was nothing to indicate in the review that their death or the modifiable factors identified were linked in any way to their ethnicity.

#### 16.4 Category of death:

**18** were categorised as a 'Perinatal/Neonatal event', **4** as 'Chromosomal, Genetic and Congenital Anomalies', **4** as 'Sudden Unexpected, Unexplained death', **2** from 'Deliberately inflicted injury', **2** from 'Trauma and other External factors' **2** from an 'Acute medical or surgical condition' and **2** from a 'Chronic medical condition'. (The remaining 1 cannot be categorised due to being a single number). As in the last 2 reporting years the first 3 categories remain unchanged.

#### 16.5 Place of event which led to the child's death

**23** were in hospital at the time of death either in the Neonatal Unit, Special Care Baby Unit, Paediatric Intensive Care Unit, High Dependency Unit, Paediatric Ward or Delivery Suite. In **9** deaths modifiable factors related to medial service provision, i.e. access to healthcare or prior medical or surgical intervention. In **13** of the 23, modifiable factors related to lifestyle choices, i.e. maternal smoking during pregnancy, a high BMI, substance misuse and consanguinity. (The remaining 1 cannot be categorised due to being a single number). Of the remaining **12**, **10** occurred at the home address and **2** died in a public place.

16.6 Child Protection Plans / Statutory Orders:

None of the children reviewed were subject of a Child Protection Plan or Statutory Order at the time of their death.

## 17 West Midlands Regional CDOP/SUDC Network:

This network attended by CDOP Co-ordinators/Managers, CDOP Chairs and health professionals involved in sudden and unexpected deaths was re-convened in January 2016 after Dr Claire Thomas, Wolverhampton Designated Doctor for Unexpected Deaths volunteered to chair this meeting. The network has agreed to meet 4 times a year and has met 3 times so far in 2016. As the network last met in 2013, work is being undertaken to review the terms of reference and membership of the group and now has a parent representative as a member. The Network is also being supported by the Network Development Manager, Partners in Paediatrics. The Network is rotating venues but ideally hopes to secure a permanent venue in Birmingham which is easily accessible to all.

#### 17.1 Work streams:

Other areas of work are also being progressed, as follows:

- 17.2 Scoping exercises are underway in the areas of 'rapid response' investigations and neonatal reviews to identify issues, good practice and gauge consistency across the region. The Network Manager for Staffordshire, Shropshire and Black Country Newborn & Maternity Network has agreed to assist with the neonatal review.
- 17.3 A 'Task and Finish' group is meeting in September 2016 to review the revised West Midlands SUDC Protocol. A further 'Task and Finish' group will be convened to progress a Pan-West Midlands SUDC Protocol which the network has recommended and referred to in paragraph 8.4.2.
- 17.4 A 'Task and Finish' group is meeting in October 2016 to begin work on producing a regional CDOP Annual Report as one has not been produced since 2012.

#### 18 National learning from deaths reviewed during 2015-2016

The following has been extracted from the Statistical Release 2015-2016 report produced by the Department for Education in relation to deaths reviewed during this reporting year.

- 18.1 3,665 child death reviews were completed by CDOPs in the year ending 31 March 2016 which is an increase from the 3,515 deaths reviewed during 2014-2015. Modifiable factors were identified in 24% of deaths which is the same percentage as the previous year. In a small number of cases (56) CDOPs were unable to determine if there were modifiable factors as there was insufficient information available.
- 18.2 National findings mirror our sub-regional findings in that; most reviews relate to a 'Perinatal / Neonatal Event' in the 0-27 day age group; males have consistently accounted for more than half of the deaths reviewed and children from a White background have consistently accounted for around two-thirds of reviews completed. By contrast, 17% of deaths reviewed nationally were children from an Asian background.

#### 19 Processes:

# 19.1 Involving families in the child death review process

In the **85** deaths notified in 2015-2016, **47** leaflets were handed to the family by a professional known to the child/family or involved with their child's death and **38** were posted by the CDOP Manager, as a professional was no longer involved with the family. **9** parents responded to the CDOP Manager (2 Coventry, 3 Solihull and 4 Warwickshire). Some just wanted more

information about the panel and when their child's death would be reviewed. Others had questions or concerns which the CDOP Manager dealt with or passed on to the appropriate Trust.

- 19.2 CDOP Membership:
- 19.3 Coventry CDOP has three new members; a GP representing Coventry and Rugby Clinical Commissioning Group; the Named Nurse for Child Protection, Coventry and Warwickshire Partnership Trust and the newly appointed Serious Case Review Co-ordinator. The new members have enhanced the panel and it is particularly beneficial having a GP representative back on the panel and having a direct link between CDOP and the Serious Case Review process. Unfortunately the Education Service could not provide a permanent panel member following the retirement of the previous member but will provide support if an education issue is highlighted. The Director of Coventry Public Health is now the Chair of Coventry CDOP.
- 19.4 Warwickshire CDOP, which was under-represented by health professionals from North Warwickshire, now has two members from George Eliot NHS Trust; their Lead Governance Midwife and Paediatric Matron. This has enhanced the process, particularly with the two-way dissemination of learning identified by CDOP and from internal reviews conducted by the Trust. The Director of Quality and Performance, South Warwickshire Clinical Commissioning Group became a core member of CDOP in 2015 and provides a positive contribution, particularly when commissioning issues are discussed.
- 19.5 Solihull CDOP has secured the membership of a Head Teacher and an Independent Reviewing Officer on their panel and their perspective has greatly contributed to reviews. A representative from the Clinical Commissioning Group (CCG) was discussed at Solihull Safeguarding Children Board in 2015 and it was agreed that the Designated Doctor for Unexpected Deaths will also represent the CCG on Solihull CDOP.

19.6 Collation of National Child Death Data and National CDOP learning:

In last year's annual report, it was reported that the National Perinatal Epidemiology Unit (NPEU) at University of Oxford had been commissioned by the Healthcare Quality Improvement Partnership to scope the requirements and feasibility of developing a national database which could collate national child death data and learning from reviews. Regional consultation workshops took place in 2015 and NPEU were due to report on their findings in July 2016. An update was provided at this time by NPEU which stated that the report will now be published when the national CDOP database is put out for tender, anticipated to be later on in 2016.

#### 19.7 Proposed Changes in Ministerial Responsibility:

Following the review conducted by Alan Wood on behalf of the Department for Education a recommendation was made that the national sponsor for CDOPs should move from the Department for Education to the Department of Health. The report also recommended that the national database be expedited. The Government supported the recommendation and agreed to put in place arrangements to transfer the national oversight of CDOPs from the Department for Education to the Department of Health, whilst ensuring that the keen focus on distilling and embedding learning is maintained within the necessary child protection agencies.

#### 20 CDOP Working Group

The CDOP Working Group, formed in 2007 to progress the operational elements of the child death review process met once during 2015-2016. The group usually meets twice a year but it was mutually agreed that it was not necessary to meet twice as the process was working well with no key issues to report.

#### 20.1 Other work:

In 2014 the CDOP Manager was requested to provide Warwickshire child death data to Warwickshire Clinical Commissioning Groups (CCG) to assist with any commissioning requirements that may be identified. Two years of data was provided in 2015 and a third year of data will be provided this year in a separate report to the CCGs.

# 21 CDOP Budget - Expenditure 2015 – 2016

Salaries: CDOP Manager and CDOP Officer.		£62,001
Travel		£289
Office costs (stationary, photocopying, phones, IT		£1,287
charges.)		
Central establishment charges		£15,410
Budget from Warwickshire	£41,187	
Contribution from Solihull	£13 000	
Contribution from Coventry	£24,800	
Total Income	£78,987	
Total expenditure		£78,987

#### 22 Sub-Regional Data on Child Deaths Notified in 2015 – 2016:

- 85 deaths were notified across the sub-region in 2015-2016, (Coventry =31, Solihull = 19 and Warwickshire = 35) a slight increase from 2014-2015, where 77 deaths were notified. The increase has been seen by Coventry and Solihull (28 Coventry deaths and 14 Solihull deaths notified in 2014-2015). Warwickshire had remained static with 35 deaths also reported in 2014-2015.
- 22.2 Appendix 'E' gives a breakdown of deaths reported year on year under each category.

#### 23 Sub-Regional Deaths by Category 2015-2016 (Total 85)

Definitions of the categories used are as follows:

*Neonate (NN):* 0-27 days of age very often born prematurely and in the vast majority of cases have never left hospital.

*SUDC* – Sudden and Unexpected Death where the cause of death is not known and where a multi-agency 'Rapid Response' investigation under the Sudden and Unexpected Deaths in Children (SUDC) Protocol has been conducted or a police investigation conducted on behalf of the Coroner.

*Medical* - An unexpected death but where the cause of death is known and a death certificate is issued, e.g. epilepsy, asthma, infection.

*LLC* – expected death from a life limiting condition where the cause of death is known and a death certificate is issued.





23.2 Sub-Regional Deaths by Age 2015-2016 (Total 85)



23.3 Deaths in the 0-27 day age group are the highest age group as expected followed by the 28-364 day category which equates to 69% of the total dying within their first year of life. This is consistent with previous years and mirrors the national picture based on the reviews conducted in 2015-2016. 49% of modifiable factors (17out of 35) were identified in the 0-27 day age group as outlined in paragraph 6.

#### 23.4 Sub-Regional deaths by Gender 2015-2016 (Total 85)



23.4.1 More male than female deaths is consistent with previous years and also mirrors the national findings based on the number of reviews in 2015-2016.



#### 23.5 Sub-Regional Deaths by Ethnicity 2015-2016 (Total 85)

23.5.1 66% of all deaths were from a White British background. The vast majority of 'White Other' are from EU countries (6 out of the 8). Categories that have a total of 2 or less have been merged in accordance with disclosure control guidance issued by the NHS Information Centre for Health and Social Care.

#### 24 Sub-Regional Aggregated Data 2008 – 2016 (Total 654)

- **Deaths Per LSCB Area** 8 years 2008-2016 50 45 40 35 30 Coventry 25 20 Solihull 15 Warwickshire 10 5 0 2008.09 2009-10 2010-11 2011-12 2012-13 2013-14 2014-15 2015-16
- 24.1 Number of deaths reported per year per LSCB area 2008 2016 (Total 654)

24.2 Sub-Regional Aggregated Data 2018-2016 by Category of Death (Total 654)



24.3 Sub-Regional Aggreagated Data 2008-2016 by Age (Total 654)



24.3.1 69% of children died within their first year of life (437 out of 654)





24.4.1 The 2 unknown are extremely premature babies where gender could not be ascertained.



24.5 Sub-Regional Aggregated Data by Ethnicity 2008-2016 (Total 654)

- 24.5.1 The 'Not Known' are deaths from 2008-2009 and a few from 2009-2010 when ethnicity was not requested on the national template forms. This changed in early 2009-2010 and ethnicity has been captured since.
- 24.5.2 With the exception of consanguinity as outlined in paragraph 7.1 the ethnicity of children from a black or minority ethnic group had no bearing on the cause of their death.



#### 24.6 Sub-Regional Road Traffic Collisions by Age 2008 – 2016 (Total 31)

24.6.1 Further information is contained in paragraph 11.1

Author: Dara Lloyd Child Death Overview Panel Manager Coventry, Solihull and Warwickshire Safeguarding Children Boards

# Appendix 'A'

#### **Coventry Child Death Overview Panel**

1 CDOP Members during 2015-2016:

John Forde, Consultant in Public Health (Chair) Dr James Burden, CCG, NHS England (Vice Chair) Gillian Attree, Named Nurse for Child Protection, UHCW Moira Bishop, Named Nurse for Child Protection, Coventry and Warwickshire Partnership Trust Lesley Cleaver, Support Nurse for Vulnerable Families Sandra Kerr, Manager, Children's Social Care Nichola Lamb, Safeguarding Support Midwife, UHCW Jayne Phelps, Designated Nurse for Child Protection Amanda Reynolds, Manager, Early Years Dr Brian Shields, Consultant Paediatrician (Acute Services) UHCW Detective Inspector Sally Simpson/ Jo Floyd, West Midlands Police

- 1.1 Co-opted Members: Dr Kate Blake, Consultant Neonatologist Andrew Proctor, Safeguarding Manager, West Midlands Ambulance Service
- 2 Details of the number of CDOPs held and the number of deaths reviewed is outlined in paragraph 2 of the annual report. A summary of the recommendations and actions arising from Coventry CDOP are outlined in paragraph 3.

#### 3 **Coventry Child Death Data:**

**31** deaths were notified in 2015-2016, an increase of 3 from the previous year. Year on year numbers are shown in paragraph 24.1 and in Appendix 'E'.

3.1 Explanations of the abbreviations and categories are outlined in paragraph 23. Categories that have a total of 2 or less have been merged in accordance with disclosure control guidance issued by the NHS Information Centre for Health and Social Care.



# 3.2 Coventry Deaths by Category 2015-2016 (Total 31)



# 3.4 Coventry Deaths by Age 2015-2016 (Total 31)



# 3.5 Coventry Deaths by Age - Aggregated Data 2008-2016 (Total 261)



# 3.6 Coventry Deaths by Gender 2015-2016 (Total 31)



# 3.7 Coventry Deaths by Gender – Aggregated Data 2008-2016 (Total 261)







#### 3.9 Coventry Deaths by Ethnicity – Aggregated Data 2008 – 2016 (Total 261)



#### 4 Summary:

- 4.1 Neonatal deaths have consistently been the highest category of death since the process began in 2008. Likewise the 0-27 day age group remains the highest age group in both yearly and aggregated data and as in previous years the majority of deaths occurred within the first year of life **176** out of **261** (67%). These findings also mirror national findings and that of Solihull and Warwickshire
- 4.2 With regards to gender, both the yearly data and aggregated data show more male deaths than females which mirror national findings and that of Solihull and Warwickshire.
- 4.3 With regards to ethnicity, children of White British origin remain the single highest category both in the yearly and aggregated data, accounting for 45% of the total. With the exception of consanguinity as detailed in paragraph 7.1, ethnicity had no bearing on deaths from black and minority ethnic groups.
- 4.4 The 'Not Known' are deaths from 2008-2009 and a few from 2009-2010 when ethnicity was not requested on the national template forms. This changed in early 2009-2010 and ethnicity has been captured since.

#### Appendix 'B'

#### Solihull Child Death Overview Panel

1 CDOP Members during 2015-2016:

Ian Mather, Consultant in Public Health (Chair) Jane Davenport, Head Teacher Alison Frost, Team Leader, Solihull MBC Legal Services Carol Owen, Named Midwife for Safeguarding Children, Birmingham Heartlands Hospital Detective Inspector Sally Simpson/ Jo Floyd, Police Public Protection Unit, West Midlands Police Dr Alan Stanton, Consultant Paediatrician (Community) Anna Stephens, Independent Reviewing Officer and Local Authority Designated Officer (LADO)

#### 1.1 Co-opted member:

Dr Richard Mupanemunda, Consultant Neonatologist, Birmingham Heartlands Hospital. Andrew Proctor, Safeguarding Manager, West Midlands Ambulance Service

2 Details of the number of CDOPs held and the number of deaths reviewed is outlined in in paragraph 2 of the annual report. To date it has not been necessary to convene a Fast Track CDOP but this will be considered if the numbers demand. A summary of the recommendations and actions arising from Solihull CDOP are outlined in paragraph 4.

#### 3 Solihull Child Death Data

**19** deaths were notified in 2015 -2016, an increase of **5** from the previous year. The increase has been seen in the category of neonatal deaths and sudden and unexpected deaths. Deaths reported year on year since the process began in 2008 are shown in paragraph 24.1 and in Appendix 'E'.

3.1 Explanations of the abbreviations and categories are outlined in paragraph 23. Categories that have a total of 2 or less have been merged in accordance with disclosure control guidance issued by the NHS Information Centre for Health and Social Care.



#### 3.2 Solihull Deaths by Category 2015-2016 (Total 19)



3.4.1 Age groups 1-4 and 5-9 years have been merged as have 10-14 and 15-17 years.





# 3.6 Solihull Deaths by Gender 2015-2016 (Total 19)



# 3.7 Solihull Deaths by Gender – Aggregated Data 2008-2016 (Total 107)



# 3.8 Solihull Deaths by Ethnicity 2015-2016 (Total 19)



3.8.1 Remaining ethnicities have been grouped under 'Other' due to single numbers.

#### 3.9 Solihull Deaths by Ethnicity – Aggregated Data 2008-2016 (Total 107)



#### 4 Summary

- 4.1 As already stated there has been an increase of **5** deaths from the previous year with the increases seen in the category of neonatal deaths and sudden and unexpected deaths
- 4.2 0-27 days remains the highest age group as it has in previous years in both yearly and aggregated data. Looking at the aggregated data, the majority of deaths occurred within the first year of life, 66 out of 107 (62%) which is consistent with national findings and mirrors the findings of Coventry and Warwickshire too.
- 4.3 With regards to gender, both the yearly data and aggregated data show more male deaths than females which is consistent with national findings and mirrors the findings of Coventry and Warwickshire.
- 4.4 With regards to ethnicity, children of 'White British' origin continues to be the highest category as it has done over previous years, with aggregated data showing 63% (67 out of 107) of children being from this ethnic group. In relation to the remaining 37% of children from a black or minority ethnic group, their ethnicity did not have any bearing on their death.
- 4.5 The 'Not Known' are deaths from 2008-2009 when ethnicity was not requested on the national template forms. This changed in early 2009-2010 and ethnicity has been captured since.

# Appendix 'C'

# Warwickshire Child Death Overview Panel

1 CDOP Members during 2015-2016:

Cornelia Heaney, Development Manager for Warwickshire Safeguarding Children Board (WSCB) (Chair) Jenny Butlin-Moran, Service Manager, Service Development and Assurance (Children's) Gaynor Armstrong, Lead Governance Midwife, George Elliot Hospital Carla Elliott, Paediatric Matron, George Elliot Hospital Cathy Ellis, Consultant in Child Health Victoria Gould, Young People Legal Services Manager, Warwickshire County Council Dr Prakash Kalambettu, Locum Consultant (Acute Services), SWFT Dr Kathryn Millard, Consultant in Public Health Adrian Over, Safeguarding Children Manager for Education Lorraine Parsons, Clinical Governance Midwife, South Warwickshire Foundation Trust Dr Peter Sidebotham, Consultant Paediatrician (Community) Katrina Symonds – LSCB Lay Member Detective Inspector Alan Townsend, Warwickshire Police Alison Walshe – Director of Quality and Performance, South Warwickshire Clinical Commissioning Group Linda Watson, Assistant Head for of Children, Young People and Family Service,

- 1.1 Co-opted member: Andrew Proctor, Safeguarding Manager, West Midlands Ambulance Service
- 2 Details of the number of CDOPs held and the number of deaths reviewed is outlined in paragraph 2. A summary of recommendations and actions arising from Warwickshire CDOP are outlined in paragraph 5.

#### 3 Warwickshire Child Death Data:

**35** deaths were notified in 2015-2016, the same number as the previous year. Deaths reported year on year since the process began in 2008 are shown in 24.1 and in Appendix 'E'.

3.1 Explanations of the abbreviations and categories are outlined in paragraph 23. Categories that have a total of 2 or less have been merged in accordance with disclosure control guidance issued by the NHS Information Centre for Health and Social Care.



# 3.2 Warwickshire Deaths by Category 2015-2016 (Total 35)

# 3.3 Warwickshire Deaths by Category – Aggregated Data 2008-2016 (Total 286)



#### 3.4 Warwickshire Deaths by Age 2015 -2016 (Total 35)



3.4.1 Age groups 1-4 years and 5-9 years have been merged together as have 10-14 years and 10-17 years due to low numbers.



#### 3.5 Warwickshire Deaths by Age – Aggregated Data 2008-2016 (Total 286)

# 3.6 Warwickshire Deaths by Gender 2015-2016 (Total 35)



# 3.7 Warwickshire Deaths by Gender – Aggregated Data 2008-2016 (Total 286)



# 3.8 Warwickshire Deaths by Ethnicity 2015-2016 (Total 35)



3.8.1 'Other' deaths cannot be further categorised due to the low numbers.



3.9.1 The 'Not Known' are deaths from 2008-2009 when ethnicity was not requested on the national template forms. This changed in early 2009-2010 and ethnicity has been captured since.

## 4 Summary

- 4.1 Neonatal deaths continue to be the highest category both yearly and from 8 years of aggreagted data which is consistent with national findings and mirrors the findings of both Coventry and Solihull.
- 4.2 0-27 days remains the highest age group as it has in previous years in both yearly and aggregated data. Looking at the aggregated data, the majority of deaths have occurred within the first year of life **194** out of **286** (68%) which is consistent with national findings and mirrors the findings of Coventry and Solihull.
- 4.3 With regards to gender, both the yearly data and aggregated data show more male deaths than females which is consistent with national findings and mirrors the findings of Coventry and Solihull.
- 4.4 With regards to ethnicity, children of 'White British' origin continues to be the highest category as it has done over previous years, with aggregated data showing 72% (207 out of 286) of children being from this ethnic group. With the exception of consanguinity as detailed in paragraph 7.1, ethnicity had no bearing on deaths from black and minority ethnic groups.
- 4.5 The 'Not Known' are deaths from 2008-2009 when ethnicity was not requested on the national template forms. This changed in early 2009-2010 and ethnicity has been captured since.

# Appendix 'D'

# Rapid Response Investigation – Sudden Unexpected Death in Children Protocol

Chapter 5 of Working Together to Safeguard Children 2015, defines the unexpected death of an infant or child (less than 18 years old) as a death:

- Which was not anticipated as a significant possibility for example, 24 hours before the death; or
- Where there was a similarly unexpected collapse or incident leading to or precipitating the events which lead to the death

## **Response to Unexpected Deaths**

All Local Safeguarding Children's Boards are expected to have procedures in place to ensure there is a co-ordinated multiagency response to unexpected deaths. Where a death is sudden, unexpected and unexplained a 'rapid response' investigation will be instigated, as follows:

- a) The immediate history taking, examination of the child and investigations will be carried out and support provided to the family.
- b) The designated paediatrician will notify the Coroner, Police Senior Investigating Officer, Children's Social Care and immediate information sharing will take place.
- c) A home visit will take place within 24 hours, by the Police and a health professional, i.e. a Paediatrician or specialist nurse to visit the scene of death; obtain a more detailed history; explain the process to parents/families and facilitate support to the family.
- d) A post- mortem examination will take place.
- e) An initial multi-agency information and planning meeting will take place chaired by the designated paediatrician, after the initial post-mortem results are known. This can take place verbally over the telephone if there are no concerns.
- f) A final multi-agency case discussion meeting will be convened and chaired by the designated paediatrician when all of the information has been obtained, including the final post mortem report. All agencies known to the child and/or involved in the rapid response investigation are invited. At this meeting any contributing factors will be identified and on-going support for the family. The minutes of this meeting will be provided to the Coroner prior to the Inquest (if being held) and to the Child Death Overview Panel.
- g) A meeting will be arranged with the parents to; discuss the cause of death and any contributing factors, identify and facilitate any on-going needs and advise re tissue retention. The professional(s) identified to meet with the family is agreed at the final case discussion meeting and is usually the designated paediatrician. If the family decline a meeting, the findings will be conveyed by letter by the designated paediatrician.
- h) An Inquest may be held by the Coroner but changes to the Coroner's Rules states that the Coroner does not have to hold an Inquest if death from natural causes has been ascertained.

West Midlands and Warwickshire have both produced a 'Best Practice Multi-Agency Protocol for Sudden Unexpected Deaths of Infants and Children under 18 years of age' (SUDC Protocol)

Please see the following flowchart overleaf as detailed in Chapter 5 of Working Together to Safeguard Children 2015.

#### Process for rapid response to the unexpected death of a child



#### Appendix 'E'

#### NOT FOR PUBLIC DISSEMINATION DUE TO LOW NUMBERS

#### Categories of Deaths 2008-2016 Per Year and Area

Year	Area	Neonates	SUDC	Medical	LLC	TOTAL
08/09	Coventry	15*	8	11	3	37
09/10	Coventry	23*	5	8	3	39
10/11	Coventry	12	8	2	6	28
11/12	Coventry	17	12	4	7	40
12/13	Coventry	13	9	0	7	29
13/14	Coventry	14	9	0	6	29
14/15	Coventry	9	9	2	8	28
15/16	Coventry	14	6	2	9	31
08/09	Solihull	10	3	2	2	17
09/10	Solihull	3	2	2	0	7
10/11	Solihull	4	3	3	2	12
11/12	Solihull	7	2	0	3	12
12/13	Solihull	5	5	1	1	12
13/14	Solihull	10	2	0	2	14
14/15	Solihull	6	5	0	3	14
15/16	Solihull	7	8	0	4	19
08/09	Warwickshire	9*	11	8	8	36
09/10	Warwickshire	11*	9	7	7	34
10/11	Warwickshire	24	10	3	7	44
11/12	Warwickshire	22	10	0	7	39
12/13	Warwickshire	13	6	3	2	24
13/14	Warwickshire	20	10	0	9	39
14/15	Warwickshire	19	7	1	8	35
15/16	Warwickshire	18	7	3	7	35
TOTAL		305	166	62	121	654

#### Definitions below:

**Neonates** 0-27 days, the vast majority are born prematurely and never leave hospital. \* denotes under reporting in these early years as the process was still new

**SUDC:** Sudden and Unexpected Deaths in Children where cause of death is not known and an investigation is conducted to ascertain the cause of death. The investigation will either be a multi-agency 'Rapid Response' investigation as per the Sudden and Unexpected Death in Children (SUDC) Protocol or a police investigation as in the case of fatal road traffic collisions. All will be subject of a Coroner's post mortem examination and some also will have an Inquest. (The change in Coroner's rules gives the Coroner discretion not to hold an Inquest if death is found to be from natural causes.)

**Medical:** An unexpected death but where a medical cause is known and a death certificate can be issued without the need for further investigation.

**LLC:** Expected deaths from a life limiting condition, caused of death known and a death certificate is issued.

# <u>NOTES</u>

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