

What is multi-agency SUDI prevention?

- · All families should receive universal SUDI prevention / safer sleep info before and after birth, but...
- Some do not engage with antenatal care or health visitor appointments · Some forget the safer sleep info they have been given or don't tell
- partners or other carers Some are unable to implement the guidance due to lack of resources. temporary living arrangements, disruptions or other family
- Other professionals often have more frequent access to these families and better opportunities to provide information and support
- Multi-agency SUDI prevention involves offering all professional staff the information and skills to observe, listen, signpost and intervene to prevent sudden unexpected infant deaths



Why Northumberland

not declined for several years.





2



The Multi-agency SUDI Prevention Project aims to eliminate the unexpected deaths of babies (under 1 year of age) in Northumberland. It is jointly funded by Northumberland County Council, Northumberland Family Hubs, and Northumbria Healthcare NHS Foundation Trust

Professor Helen Ball, Durham Infancy & Sleep Centre, Durham University Ms Carla Anderson, Public Health Midwife, Northumbria Healthcare Mr Jon Lawlor, Public Health Consultant, Northumberland County Council The project aims to implement a multi-agency workforce approach to SUDI prevention in vulnerable families. This involves training local authority staff, NHS staff, and staff of partner services who may encounter vulnerable families with babies.









SUDI (Sudden Death in Infancy) is now more likely to happen in some

Deaths occur most often in families living in impoverished circumstances with multiple risks or vulnerabilities In Northumberland 17.6% of all children are living in absolute poverty

(n=9078 children in 2022 where families received less than 60% of the median income established 2010-11). UK average =15.3%.

In Northumberland approximately 5 SUDIs occur per year and this rate has

Most SUDIs are preventable

3

Three strands of training

Strand 1 is for workforce members staff who go inside homes, who talk to new parents, or who help in a crisis. They will keep 'Eyes on the Baby': observe, listen, nudge, and refer/report

Strand 2 is for workforce members who provide direct support to vulnerable families They will raise awareness of and reinforce SUDI prevention: explore, remind,

Strand 3 is for health professionals who are involved in the routine or emergency care of pregnant and post-partum women and

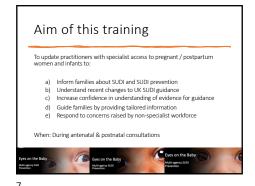
They will offer universal and targeted safer sleep guidance: inform, understand, guide, refer/report, and respond to concerns from staff in strands 1 & 2 as needed.

5

This is Strand 3

This training is for health and care professionals who are involved in the specialist routine care of pregnant and post-partum women* and babies, or provide emergency care for parents and babies:

Community Midwives Neonatal Care Staff



This training covers Part 1: Safer sleep for all babies · Universal provision and underpinning evidence · New safer sleep discussion tools Part 2: Understanding co-sleeping & bed-sharing Why and how UK guidance has changed · Risk minimisation and tailored guidance (difficult conversations) Part 3: Targeted prevention for vulnerable and at-risk families · Vulnerable families & SUDI Evaluation

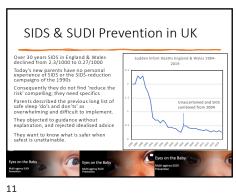
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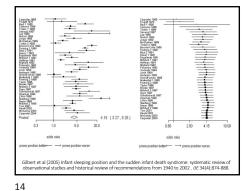
What are SUDI and SIDS? SUDI = Sudden Unexpected Death in Infancy The death of a baby which was not anticipated as a significant possibility 24 hours before the death. furtive manner SIDS = Sudden Infant Death Syndrome (retrospective classification)

• "[T]he sudden unexpected death of an infant <1 year of SIDS /sidz death sync "[I] he sudden unexpected death of an infant <1 year of age, with onset of the fatal episode apparently occurring during sleep, that remains unexplained after a thorough investigation, including performance of a complete autopsy and review of the circumstances of death and the clinical history" (Krous et al 2004) siege /sōi/ SUDI encompasses SIDS but also includes accidental deaths, homicides (rare), and sudden onset illnesses causing catastrophic collapse



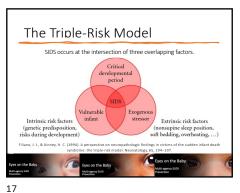
Preventing the unexpected? As SUDIs are unexpected and SIDS have no underlying cause to tackle, how do we prevent them? We need comparisons with babies who don't die to compare the differences: case-control study design Compare characteristics of SIDS babies (cases) with control babies matched for key criteria Factors that are associated with being in the SIDS group but not control group = risk factors CASE-CONTROL















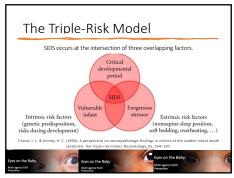
Prematurity · Preterm babies are 2-3 times more likely to experience SIDS than term babies (US data). Preterm babies have an immature central respiratory control centres, hindering their ability to respond to respiratory challenges. Studies have found lower adherence to safer sleep guidelines among parents of preterm than term infants. Maternal perceptions of the special needs and vulnerabilities of their preterm babies meant that sleep safety recommendations seemed less important. Preterm infants are disproportionately born to women living in socio-economically deprived circumstances and to women who consumed drugs, alcohol, tobacco products in pregnancy

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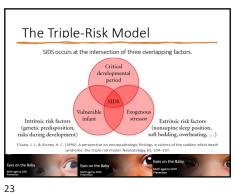
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Critical developmental period SIDS peak between 2-4 months

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External risk factors Also called 'Exogenous stressors' = sleep environments that can physiologically stress a vulnerable baby triggering a homeostatic malfunction ('irreversible cascade') from which the infant cannot recover. Healthy non-vulnerable infants arouse from sleep and mount a physiological response to an exogenous stressor, but vulnerable infants may not. Key pathways involve: Thermoregulatory (overheating) challenges · Cardio-respiratory (breathing) challenges Ramirez JM, Ramirez SC, Anderson TM. Sudden Infant Death Syndrome, Sleep, and the Physiology and Pathophysiology the Respiratory Network. In: Duncan JR, Byard RW, editors. SIDS Sudden Infant and Early Childhood Death: The Past, the



Overwrapping / overheating The amount of bedding and clothing (insulation) was significantly higher for babies who died from SIDS than controls, and that cases were more likely to have had the heating on all night. Several factors such as fever from infection, prone sleeping, over-wrapping or bedclothes covering the head, can affect thermal balance by making a baby too hot or reducing their ability to lose heat. A room temperature of 16-20°C, combined with light bedding offers a comfortable and safe environment for sleeping babies. Baby sleep bags are often recommended to avoid overwrapping and head covering.



Feet-to-foot In the UK 'feet-to-foot' guidance was introduced to help parents remember to put their baby's feet at the foot of the cot to stop them wriggling down under the covers. This guidance was a pragmatic suggestion intended to keep the head from being covered, a risk which has previously been seen in SIDS victims in early casecontrol studies. But, there have been no case control studies that have examined whether 'feet to foot' worked as a SIDS reduction message. Feet-to-foot is mentioned, but no longer emphasised due to the lack of clear evidence, and the widespread use of sleeping bags that now makes it less easily understood.



Lone sleep Multiple studies have found that leaving babies to sleep in a room on their own increases the chance of SIDS for both night-time and day-time Babies should sleep in the same room as their parents/carer both day and night One case control study found the risk of unsupervised sleep during the day was almost double that of unsupervised sleep at night A travel cot. Moses basket, playpen, or carrycot followed

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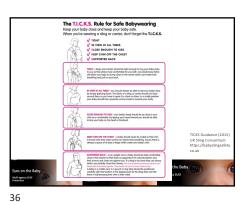






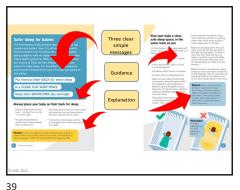












What has changed? We no longer say "The safest place for a baby to sleep is in a cot by your Firstly, parents interpreted this guidance to mean the baby should be placed in the bedroom for daytime as well as night-time sleep, increasing the chance of SIDS during daytime sleep. It is safer for a baby to sleep in a room where an adult is present than to sleep alone, and most families do not have a cot in their living room. Emphasising a clear flat space for sleep offers parents options. Secondly, the assumption that all bables sleep in cots, and indeed that parents' bedrooms and budgets can accommodate a cot reflects a middle-class lifestyle that centres Western cultural assumptions about where bables sleep. A clear flat sleep space' eliminates assumptions that

40

can alienate families

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Co-sleeping & bed-sharing So far all the guidance we have considered relates to babies sleeping alone The evidence and guidance about bed-sharing and co-sleeping has changed in the UK over the past few years. In the next section we will consider the research on bed-sharing and cosleeping in more detail to provide a thorough understanding of the issues This should allow you to feel confident discussing this with parents and answering their questions.



Understanding bed-sharing . Bed-sharing & co-sleeping have been poorly understood Even the terminology has been variable and inconsistent We use bed-sharing to refer to baby and parent sleeping together in a bed We use co-sleeping to mean baby and anyone sleeping together anywhere Bed-sharing is NOT when carer is awake and feeding Knowledge about why, when and how bed-sharing and co-sleeping happens has improved substantially over past 30 years Information about the risks associated with co-sleeping and bed-sharing have become clearer over the past decade Risks are not uniform across all families and contexts



Understanding human babies · Humans produce single infants, born with well developed internal and sensory organs (see, hear, call) = precocial Lactation characteristics of precocial mammals: milk = low fat/high sugar, infants need to feed frequently Poorly developed neuro-muscular control = unable to follow or even cling because typical brain growth cannot be completed prior to birth · Parents must maintain close contact, feed frequently day and night. Contact important for warmth, safety, physiological regulation. Sleeping together is what babies expect!



Bed-sharing is a cultural practice Most parents have deeply-rooted beliefs about infant care – cultural, Guidance on the safest position for infant sleep is very different from advice to avoid bed-sharing as this is often part of parents' coping strategy, their personal beliefs or their parenting values, not just an infant care practice. Telling parents to change these beliefs challenges their values and those of their community – dismissed as culturally or personally irrelevant. This is one reason efforts to stop bed-sharing are so contentious. Parents dismiss dogmatic recommendations that they don't agree with, or can't comply with.

46

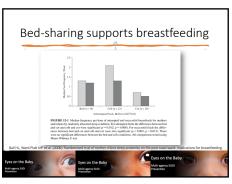






Bed-sharing is a way of coping "If he's having a night where he wants to nurse a lot I'll put him in bed with me and I'll just sleep and he just latches on when he wants to and it doesn't really interrupt my sleep a great deal."

51



Bed-sharing supports breastfeeding ANY breastfeeding by frequency of bed-sharing Bed-shared sometimes 54



Breast-feeders resist bed-sharing 'bans' Strong association between breastfeeding and infant sleep location. The majority of mothers who breastfeed bed-share. Facilitates night-time feeding, and helps maintain milk supply. Breastfeeding bed-sharers strongly resist anti-



Co-sleeping & bed-sharing Evidence is clear that certain situations increase the dangers to babies: . Co-sleeping with a baby on a sofa Sleeping with a baby following consumption of any drugs or alcohol · Sleeping with a baby if a cigarette smoker Sleeping with a premature or low birthweight baby Unplanned co-sleeping/bed-sharing is more risky than intentional and planned bed-sharing in a safety-proofed adult bed. In the absence of hazards there is little to no evidence of increased risk. Guidance must be balanced to minimise risk while encouraging informed choice. This encourages open discussion, information sharing, and planning ahead.

57





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Talking matters 50% or more of UK babies will spend some time sleeping with one or both parents by 3 They may do this frequently, occasionally, just once. They may plan to do this, do it spontaneously or do it accidentally. They may think they will never do it. Talking about where babies sleep with ALL parents and carers matters, because everyone needs info on what makes sleep locations risky, and how to make them safe and 'Never Bed-share' messages prevent discussion, encourage parents to hide their behaviour, and means families who need info don't get it. Also 'Never Bed-share' messages mean practitioners do not receive appropriate training or gain experience using their professional judgement on this issue

63



What has changed? • We no longer advise 'Never Bed-share' – we aim to discuss with all In 2014 NICE moved SIDS messaging towards informed parental choice In 2021 NICE reviewed the benefits and risks of bed-sharing and recommended parents of babies are given advice about safety when sharing a bed with their baby at their first home visits from a midwife and a health visitor. This should include how to keep their baby safe when sharing a bed with their baby and when to avoid sharing a bed with their • In 2021 RCM produced new guidance that reiterates the same message

66

(c) Prof Helen Ball, Durham University





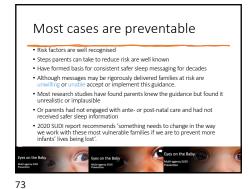


Part 3 Vulnerable / at-risk families & SUDI

69



Risks identified Unsafe sleep position (front or side) · Unsafe sleep environment Co-sleeping in the presence of other risks Over-wrapping (head covered, use of pillows or duvets) Soft sleep surface (soft or 2nd-hand mattress) Tobacco smoke exposure (pregnancy & environmental) · Alcohol and drugs (during pregnancy & while co-sleeping) Poor postnatal care (late booking and poor antenatal care attendance) Low birthweight (under 2,500g) and preterm birth (less than 37 weeks



SUDI Review Key Findings All most all of the 40 cases reviewed involved: Co-sleeping in unsafe environments Parental use of alcohol or drugs Cumulative neglect Domestic violence Parental mental health concerns 63% of cases were under 3 months, with a peak at 1 month 16 White British, 9 ethnic minorities, 15 ethnicity not given. • 10 cases = poor housing & overcrowding · Unrecognised childhood adversity for parents Particular situational risks and disruptions to normal routines meant families were unable to engage effectively with safer sleeping advice.

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Situational & out of routine risks Key finding from both incident review and systematic literature review. SR found parents were often aware of safe sleep advice but did not act on it. Disrupted routines often led parents not to follow guidance (unable to or considered not relevant) · Parents often 'cherry-pick' which safer sleep info to implement – viewed occasional risky scenarios as acceptable. "Models of intervention that rely solely on giving information are unlikely to produce meaningful change in this group" (Pease et al 2020). Eyes on the Baby



Improving engagement Tailor safe sleep conversations to families' experiences and circumstances to make information more relevant and acceptable Take a 'whole family' approach rather than focussing solely on the mother or primary Offer plausible explanations so parents understand the nature of the risk Sense-check parents' instincts and beliefs about their infant's safety Be responsive to the reality of people's lives, don't dismiss their reality Develop deeper, more open relationships with families to improve safety

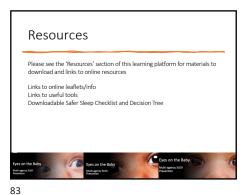


Parental Mental Health Many widely prescribed mood stabilisers can induce fatigue and sedation. Fatigued or sedated parents may lack motivation regarding infant sleep This can be reduced via a 'whole family approach' -- ensuring the presence of another adult who takes responsibility for infant sleep safety and helps with night-time feeding and infant care (make this part of prenatal SUDI is associated with parental mental health disorders, but usually in combination with multiple other risk factors such as smoking, substance use, alcohol use, domestic violence etc. When parent/s are unable to prioritise baby's needs or safety: need **Eyes on** the Baby!



Useful tools Infant Sleep App (Durham Uni) Through the Tubes (Change for our Children, NZ) Airway protection teaching tool Through the tubes

81





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