information statement

red nose
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home monitoring

Monitors are not indicated for normal healthy babies and toddlers.

Sudden Unexpected Death in Infancy (SUDI) refers to all cases of sudden and unexpected death in infancy and includes deaths from Sudden Infant Death Syndrome (SIDS) and fatal sleeping accidents. Safe sleeping recommendations target known risk factors associated with SUDI. Where studies specifically define the population as SIDS, this specific term will be used to describe the study findings.

- There is no scientific evidence that using any type of monitor will prevent a sudden unexpected infant death.[1-2]
- Some manufacturers of home monitors make false claims that they prevent sudden death.
- Monitor use is disruptive for most families and unnecessary for most babies.
- In a very small number of cases, health professionals may recommend the use of home monitors, where their use can be helpful for babies and families.[3,4,5]

All families who have a monitor recommended for their baby require baby resuscitation training (Cardio Pulmonary Resuscitation Training)

Many parents, aware of the risk of sudden infant death and wanting to provide the best possible care for their child, may consider the purchase of a home monitoring system for their baby. This may also include parents who are expecting a baby following the sudden and unexpected death of a baby previously.

All alarm systems, however, have been associated with false alarms and babies have been found dead without the monitor alarming.[6] Many babies experience apnoea (prolonged pause in breathing) and a slow heart rate exceeding the alarm thresholds and do not die. This may cause multiple false alarms. A link has not been established between prolonged apnoea and SIDS.[7-8]

There are four main types of monitoring systems: Home monitor use is only recommended under medical supervision. There is no evidence of advantages associated with monitor use.[2] The monitor is only an alarm, it is not a life saving device, and the carer also needs to be able to respond to the alarm and be trained to resuscitate the baby. There are also risks of strangulation and/or entrapment with monitors that have leads (see ACCC website https://www.productsafety.gov.au/recall/valiant-brands-angelcare-baby-monitors-with-movement-sensing-function).

Audio: Some parents find it reassuring to have a monitor between rooms. It enables them to hear unusual noises from a baby's room. They do not monitor breathing or sleeping position. Room-sharing with a baby is recommended for the first 6-12 months of life as this infant care practice has been shown to reduce the risk of sudden unexpected infant death.

Movement Monitors: A mat monitor records baby's movement and alarms after a pause in movement of 15 to 20 seconds. This monitor is placed beneath the bedding in the baby's cot and can only be used on a flat surface in a cot or bassinette. Monitors sold commercially in baby stores do not have approved standards.

A movement monitor attaches to the baby's tummy with tape or to the baby's clothing and alarms when there has been a pause in movement of the baby's tummy for over 20 seconds. This type of monitor is more portable and can be used while traveling, feeding and holding a baby. Please note that some babies have still died while these monitors were in use, for example these monitors do not detect obstructed breathing.

Heart and Breathing Monitors: Heart and breathing monitors register chest movement and the electrical activity of the heart with two electrode dots attached to the chest, or other parts of the body as a 'wearable device.[9] The heart alarm is usually set at a slow heart rate of 80 beats per minute for a very young baby or 60 beats per minute for older babies. The alarm for the apnoea or prolonged pause in breathing is set to go off after a delay between breaths of 20 seconds. These monitors have a rechargeable battery and are portable. A number of these monitors have an event linked computer chip in which the alarm is recorded and a readout is available to assess the significance of the event which has caused an alarm.

Oxygen measurement monitors and Oximeters: Oxygen measurement monitors are frequently used in hospital but are rarely used at home. Despite recent developments and improvements in these monitors, many false alarms are still reported. These monitors alarm when the oxygen percentage in the skin falls below a set limit, which is often set around 92%.[10] There is currently no evidence that these reduce risks of SIDS[11].

Monitors for hearing impaired parents: These monitors activate a vibration or light and are designed to signal to the parent that the baby is awake and needs parental attention. These monitors are not designed with the intention of reducing the risk of SUDI, including SIDS and fatal sleeping accidents. Please note that this information statement does not address monitors for parents and carers with a hearing impairment.

Health professionals supply some parents with baby monitors at home in special circumstances. These circumstances may include:

- After an 'Apparent Life Threatening Event' (ALTE) where vigorous resuscitation was required, which is when a baby is found not breathing, is blue or white, floppy and needs resuscitation by a carer.[1,12-13] However home monitoring has not been shown to be predictive of recurrence of ALTEs and thus international guidelines state that home monitoring is not indicated for routine evaluation in infants with an uncomplicated ALTE.[5] Any significant episode in which the baby stops breathing, e.g. an ALTE or an unwell baby that stops breathing needs to be seen by a doctor as there may be an underlying illness present.[1] However, many authorities do not recommend a monitor after an ALTE[5] or a previous SIDS.
- Some very premature babies who have persistent episodes of prolonged pauses in breathing and slow heart rate which may persist up to three weeks after the expected date of delivery.[1,13]
- When there is clinical evidence of a sleep related breathing disorder.[5]
- Babies with rare medical conditions that could lead to severe breathing problems, e.g. Babies with Pierre Robin Sequence who have holes in their palates and small jaws and may need to sleep on the tummy (prone); babies with tracheostomies (surgical openings) into their main breathing tube; and some babies who stop breathing or have very shallow breathing persistently and go blue due to an underlying brain problem.[1]
- Babies who require respiratory support or oxygen all the time such as those with chronic lung disease.[5]

A monitor may be very disruptive for the family and some families find using devices can increase anxiety.[2] False alarms may occur if the baby is breathing shallowly, rolls off a mat, or there are technical problems with the machine.

Some manufacturers of home monitors make false claims that they prevent sudden death. There is no evidence to support these claims.[1,2]

Monitors are not recommended for preventing sudden and unexpected infant death, including SIDS, by the Red Nose National Scientific Advisory Group, or the American Academy of Pediatrics.

Parents are advised to seek the advice of their general practitioner, paediatrician or child health nurse before purchasing and using a monitor.

The Red Nose Safe Sleeping program is based on scientific evidence and was developed by Australian SUDI researchers, paediatricians, pathologists, and child health experts with input from overseas experts in the field.
The 80% drop in SIDS deaths and the more than 9,000 lives that have been saved is testament to the effectiveness of the program.

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to reduce the risks of SIDS and fatal sleep accidents

1. Sleep **baby on the back from birth**, not on the tummy or side
2. Sleep baby with **head and face uncovered**
3. Keep baby **smoke free** before birth and after
4. Provide a **safe sleeping environment** night and day
5. Sleep baby in their **own safe sleeping place** in the **same room as an adult care-giver** for the first six to twelve months
6. **Breastfeed** baby

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1300 998 698 | rednose.com.au
education@rednose.com.au