

# **SUDDEN INFANT DEATH SYNDROME**

**A TRAINING MANUAL**

**FOR**

**HAND IN HAND CHILD CARE CENTER**

## **SIDS TRAINING**

### **DEFINITION OF SIDS**

According to the National Institute of Child Health and Human Development, Sudden Infant Death Syndrome (SIDS) is the diagnosis given for the sudden death of an infant under one year of age that remains unexplained after a complete investigation, including an autopsy, examination of the death scene, and review of the symptoms or illnesses the infant had prior to dying and any other pertinent medical history. Because most cases of SIDS occur when a baby is sleeping in a crib, SIDS is also commonly called “crib death”.

### **SOME FACTS ABOUT SIDS**

While there is no known cause or treatment of SIDS, we do know some facts about SIDS:

- SIDS is the leading cause of death in babies between the ages of one month and one year.
- Most SIDS deaths occur in infants between the ages of one and four months. Ninety percent of these deaths happen to children less than six months of age.
- SIDS can affect families of all races, religions, and income levels.
- African-American babies are twice as likely to die of SIDS than white babies. While American Indian babies are nearly three times more likely to die of SIDS than white babies.
- Boy babies have a greater risk of dying from SIDS than girl babies.
- More SIDS deaths occur in colder months than in warmer months.
- Babies placed on their stomachs are more likely to die from SIDS than babies placed on their backs.
- Mothers who smoke during pregnancy are three times more likely to have a SIDS baby and exposure to passive smoke after pregnancy doubles a baby’s risk of SIDS.
- Mother’s who are under 20 years of age at the time of their first pregnancy are at a greater risk of delivering a SIDS baby.
- Premature, low birth-weight babies, and twins and multiple birth babies run a greater risk of SIDS.

- 20.4% of SIDS deaths occur when infants are away from home and in a child care setting.
- More children die from SIDS in a year than all children who die of cancer, child abuse, AIDS, cystic fibrosis and muscular dystrophy combined.

### **WHAT CAUSES SIDS?**

While there is no official cause of SIDS after years of research, there are many theories about how babies die from SIDS. What we do know is that SIDS deaths are unpredictable and offer no warning signs. There are also a lot of misconceptions about what causes SIDS. We do know that it is **not** caused by any of the following:

- Contagious diseases
- Immunizations
- Suffocation, regurgitation, vomiting, or choking
- Child abuse or neglect
- Heredity factors
- Allergies
- How or what a baby eats
- It cannot be predicted by traumas or life threatening events.

“Re-breathing” may be a critical factor in many SIDS deaths. Some babies that die from SIDS may have a central-nervous system defect that makes them unable to detect a re-breathing situation. Re-breathing is defined as a baby not being able to get enough fresh air to breath so they must inhale much of the air that it recently exhaled. Exhaled air, which is carbon dioxide, is more likely to be trapped around the baby’s face when they lay tummy down, especially face down, and sleep on bedding that is soft. Normally, re-breathing carbon dioxide would cause the baby to reposition itself for better and cleaner air. The baby develops hypoxia (low oxygen levels) and hypercarbia (high levels of carbon dioxide) and die from SIDS.

The question of why some babies are more vulnerable to SIDS and others are not is addressed in the triple-risk hypothesis. Differences are often referred to as risk factors. Risk factors are not causes of SIDS, but they help provide clues to the causes of SIDS and why some infants are more vulnerable than others to it. The triple-risk hypothesis is evidence of certain risk factors and the interaction between the three most important factors. The factors are:

- **AGE:** remember that most deaths occur in the first six months of life, usually between one and four months.
- **PHYSICAL VULNERABILITY:** some babies are physically more vulnerable than others due to physical limitations because of diminished response to lower oxygen levels (hypoxia) and high carbon

dioxide levels (hypercarbia). This is the re-breathing that is described above.

- **SITUATIONAL RISKS:** infants are physically vulnerable when placed in a risky situation. Prone sleeping position, soft bedding (i.e.: soft mattress, loose fitting blankets, etc.), smoke exposure, and overheating are all risk factors.

The hypothesis states that when all three of these factors overlap, SIDS will occur.

### **HOW TO REDUCE THE RISKS OF SIDS**

The triple risk hypothesis plus several other factors increase an infant's risk of SIDS. To reduce the risk of SIDS, eliminating some of these risk factors has proven effective.

Putting an infant to sleep on their backs during nap and nighttime sleeping is the easiest way to lower the risk of SIDS. In 1994, the national Back to Sleep campaign was started to promote back sleeping. Since that time the number of babies dying from SIDS has decreased by 40%. Although side sleeping was at one time preferable to back sleeping, it is not recommended anymore. The reason is due to the unstable position on their back. It is very easy for a child to accidentally roll over onto their tummy and have an unsafe breathing situation.

The Back to Sleep campaign also recommends modifying the following:

- Put the baby on a tight, firm mattress that meets all safety standards.
- Don't put the baby to sleep on a waterbed, sofa, soft mattress, beanbag, pillow, or other soft surface.
- Remove all soft bedding: pillows, quilts, comforters, blankets, lambskins, bumper pads.
- Try not to overdress or overheat the baby.
- In place of a blanket use a sleep sack or a sleeper.
- Keep babies head uncovered during sleep.
- Have a smoke-free environment before and after birth.
- If using a blanket, put the babies feet at the end of the crib and tuck the blanket around the baby from the nipple line down and around and under the crib mattress.

## **SIDS IN CHILD CARE**

Twenty percent of all SIDS deaths occur in a child care setting. These deaths may happen because babies are placed on their stomachs instead of on their backs when napping.

Unaccustomed prone sleeping may be responsible for some of the SIDS deaths in the child care setting. Unaccustomed prone sleeping is defined as the practice of placing a baby on their tummy to sleep when they are used to sleeping on their back. These babies are at extremely high risks of SIDS – some say as much as nineteen times the risk compared with non-prone sleepers.

## **CONCLUSION**

Remember that while SIDS is unpredictable, there are a lot of things that can be done to reduce the risk factors in child care.

- Always put a sleeping baby on their back when placing them in their crib for a nap.
- Remember to put the baby as close to the bottom of the crib as possible. If using a blanket, the blanket should be no higher than the nipple line and should get tucked in around the three sides of the crib mattress.
- If you have any questions about these procedures, do not hesitate to ask one of the Infant staff or the Director.

## A POST TEST

### Multiple Choice: Circle the best answer.

1. The best definition for Sudden Infant Death Syndrome (SIDS) is:
  - a. SIDS is crib death because the crib causes the death of a healthy baby.
  - b. Sudden Infant Death Syndrome (SIDS) is the diagnosis given for the sudden death of an infant under one year of age that remains unexplained after a complete investigation.
  
2. Unaccustomed Prone Sleeping by definition is:
  - a. Unaccustomed prone sleeping is defined as the practice of placing a baby on their tummy to sleep when they are used to sleeping on their back.
  - b. Unaccustomed prone sleeping is putting a blanket over the baby's head while they are sleeping in their crib on their tummy.
  - c. Unaccustomed prone sleeping is defined as the practice of placing a baby on it's back in their crib.
  
3. Rebreathing is:
  - a. The act of breathing for someone else.
  - b. A baby not being able to get enough fresh air to breath so they must inhale much of the air that it recently exhaled.
  - c. A baby receiving too much air.

### True or False

4. T or F Girls are at a higher risk for SIDS than boys.
  
5. T or F Babies should always sleep on their backs.
  
6. T or F Babies should sleep on their stomachs.
  
7. T or F SIDS is related to immunizations.
  
8. T or F SIDS only happens to white babies.
  
9. T or F The age of the mother is not one of the risk factors for SIDS.
  
10. T or F It is hypothesized that SIDS occurs when age, physical vulnerability and situational risks all overlap. The triple-risk method.