Measures to Prevent SIDS in Childcare Facilities

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This document has been prepared for childcare workers, with the intention of helping them guard against the occurrence of SIDS (sudden infant death syndrome).

Introduction

Sudden infant death syndrome (SIDS) is a disease that is very difficult to detect a child falling into apnea, even when a childcare worker is paying close attention. This is because the disease does not accompany any abnormal expressive or physical signs immediately before or after the onset of apnea. The cessation of breathing caused by SIDS occurs in unpredictable situations, even for experienced and knowledgeable childcare workers.

Although there is still no infallible way to prevent SIDS, I have summarized possible measures to reduce the risk of SIDS in childcare facilities, such as how to detect the onset of apnea as early as possible and react to it when it occurs. It is important for childcare workers to understand such measures in order to safeguard the precious lives of children. In addition, I will explain the use and selection of a suitable baby sleeping sensor. These devices are becoming popular to prevent the occurrence of SIDS together with being a method for checking sleeping children.

Points to consider when watching sleeping children

1. It is understood that the incidence of SIDS is higher in the first few weeks after a child begins attending a childcare facility. According to a survey in the US, one-third of SIDS cases occurred during the initial week, and 50% of these cases occurred on the first day children attended a childcare facility. Another survey conducted in Japan in 2006 revealed similar results, confirming a higher incidence of SIDS during the first month of attendance.[Note1]

2. It is recommended to reposition the children's sleeping position to face-up immediately after they shift their position to lying face-down or on their sides. This is because I heard that more cases of apnea caused by SIDS occurred shortly after children shifted their sleeping position to lying face-down.

- Do not place children in the prone position, excusing yourself by saying "it's OK just for putting them to sleep."

- SIDS is a disease, not simply accidental suffocation. SIDS may occur when children are sleeping either in the prone position (their mouth and nose are not blocked), in the side position, or in the supine position.

3. For children with a habit of sleeping on their stomach, try to change their habit to sleeping on their back. To gain support from their parents, it is necessary to explain to them about SIDS.[Note2] This will help them prevent the occurrence of accidents at home as well as SIDS.

4. You can check the condition of sleeping children by gently touching them. By doing so, you can quickly check their breathing, and at the same time, prevent SIDS by giving stimulation.

- With only visual checks, it is difficult to detect a child falling into apnea caused by SIDS.

5. Do not keep the room dark while children are sleeping and do not cover their face with a blanket. This will help childcare workers better observe their facial expression and ease their breathing (if the room is dark, try to adjust the brightness by opening the curtains or switching on the light).

6. You can utilize a clock-timer to check sleeping children. It is important to conduct checks on a continuous basis without fail. This will enhance not only the credibility of the check sheet but also the sound development of children.

7. Checking sleeping children can prevent SIDS occurrences and sudden accidents, in addition to detecting and responding to a sudden change in their health condition such as cramps, vomiting, and fever. Furthermore, this will enable more careful attention to be paid to them, such as controlling room temperatures or reducing the number of blankets when a child is sweating, thereby providing reliable childcare.

8. It is considered useful to introduce baby sleeping sensors in childcare facilities, because it can assist the checking of sleeping children and reduce the mental burden of childcare workers who conduct such checking. However, it should be noted that such devices cannot be used in lieu of childcare workers. Therefore, please do not think that "Using this device, I can omit the checking of sleeping children, or reduce the frequency of the checking."

About a baby sleeping sensor

1. A baby sleeping sensor is also known as a "baby sensor" or "breathing sensor" but its legal term is a "baby motion sensor." It is a medical device to detect body motion to monitor the breathing and heartbeats of children, but technically, this does not directly measure breathing and heartbeats (there are similar sensors not registered as medical devices). This device is offered in several formats, such as the under-the-mattress type, the badge /clip type, and the balloon-shaped mobile type (to place on the stomach).[Note3]

2. A baby sleeping sensor should have the fundamental use of supporting the checking of

sleeping children carried out by childcare workers.

3. There are several reported cases where children, who fell into apnea while sleeping in childcare facilities, restored normal breathing stimulated by the sensor's alarm sound. Therefore, it should be noted that sound stimulation may help children to recover from apnea during sleep. Please observe the condition of your child carefully even it seems that the alarm was wrongly triggered. For your reference, according to the Massachusetts General Hospital report in 1990, there has been no child with SIDS since 1984 after the hospital decided to place a monitor to all children who developed bradycardia, based on the observation that children with SIDS had experienced bradycardia prior to their death.Note4

4. Considering the above facts, we also expect awakening effects derived from the alarm sound of the sleeping sensor when motion is reduced.

- Please note that some types of sensor do not have an alarm function.

5. Note: When you use a remote monitoring function such as a tablet and other mobile device, please check the following conditions:

- The condition of the wireless connection of the device
- The difference between a child set in the wireless application and a child actually using the sensor (in order to prevent the wrong monitoring of a child subject to the function).

Handling of emergency cases

Please read this section for your reference when you prepare operation manuals.

1. Retain an emergency contact book next to the telephone, indicating the address, telephone number, and other details of your daycare center to be communicated to the ambulance team in case of emergency.

- This will help you to report necessary information accurately if you are in a panic at the time of making a 119 call for an ambulance.

2. If you notice a child in abnormal condition, shout loudly to raise the alarm and give the child necessary first aid such as cardiopulmonary resuscitation. Do not leave the child alone and look for someone to assist, because prompt action is required in such a case.

3. If you do not know how to handle the situation, ask for "Verbal GuidanceNote5" when making a 119 call and follow the guidance until the ambulance team arrives.

4. When receiving the "Verbal Guidance" on the phone, use its hands- free function.

* Turn the volume up to hear the voice of the emergency medical dispatcher.

- Some daycare centers require childcare workers to carry a mobile telephone at all times, for emergency situations including the occurrence of disasters.

5. Continue the first-aid treatment until the ambulance team arrives and informs you that they will take over.

For your reference: You can purchase first aid training kits (such as CPR manikins and DVDs) to learn cardiopulmonary resuscitation, etc.

- A 30-minute training program to learn how to perform cardiopulmonary resuscitation, AED, etc. in infants and adults
- A 20-minute training program to learn how to perform cardiopulmonary resuscitation and remove a foreign body which is obstructing the airway of babies

* It is necessary to regularly attend lifesaving seminars and brush up what you have learned.

Note1: "Reducing the Risk of SIDS in Child Care" published by the American Academy of Pediatrics (Copyright2004)
"The Correlation between SIDS Risk Factors and the Initial Stress of Being Looked After in a Daycare Facility" by Kazuo Ito and Noriko Nakamura, the Journal of Child Health, November 2006, Vol. 65, No. 6, pp 836-839.
http://www.ne.jp/asahi/master/lsfa/PDF/Ito_Nakamura_060916_EN_G.pdf PDF

Note2: How to communicate SIDS information to parents
Please refer to "Protect a little light: Protecting babies from SIDS (Sudden Infant Death Syndrome)" published by the SIDS Family Association Japan.
I have been consulted by numerous childcare workers, worried that parents might have child-rearing anxiety if they were given information about SIDS.
The booklet "Protect a little light" was prepared to reduce such parents' anxiety as much as possible as well as to provide useful information.

Note 3: This device falls under the general category of "Motion Sensors" defined in the Pharmaceutical Affairs Act, whose function is limited under the law to "measure body motion to assist the monitoring of breathing and heartbeats" instead of directly measuring the breathing and heartbeats of children.

*** Classification**
This device can be roughly classified into the following four types: Under-the-mattress type
Air-mattress type developed for nursing-care facilities
Badge/clip type
Advanced balloon-shaped mobile type which can be used for NICUs (newborn intensive care units)

*** Characteristics**

Under-the-mattress type/air-mattress type: this device can be placed under a blanket or a bed mattress without touching the skin of the child.
Badge/clip type: this device can be attached to the clothes (badge type) or put in the diapers.
Balloon-shaped mobile type: this device can be placed on the stomach of the child.

*** Characteristics of the "Motion Sensor"**

The sensor itself detects various vibrations including breathing and heartbeats. Each sensor manufacturer develops their unique analogical methodology to determine specific vibrations such as breathing and heartbeats.

*** Targeted use of the "Motion Sensor"** This device has been developed mainly for use in beds and infant incubators such as those for medical treatment, nursing care.

Note 4: "*Yurikago no shi -nyuyoujitotsuzenshi-shoukougun (SIDS) no hikari to kage* [A death in the cradle: The light and shadow of SIDS (Sudden Infant Death Syndrome)]" by Sumiyo Abe, p.400

Note 5: An emergency medical dispatcher will tell you how to handle the situation, which is called "Verbal Guidance."

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