

Pilot Program in Ketchikan, Alaska

By Gail Jones

Alaska can be a tough environment and this is especially true for the youngest residents of the State. Among Alaskan infants, a rate of 9.2 deaths per 100 live births remains roughly 50% higher than the national average. In a 2010 state wide study that looked at 53 infant deaths, it was discovered that at least 25 of these deaths were definitely preventable and an additional 24 could possibly have been prevented. Often the babies had been placed in a bed with other persons due to there being no other “safe” place safe for them to sleep; they then died of suffocation for various reasons. In remote areas there is an even greater risk. The state observed an 80 % increase in the occurrence of infant death where the mother’s residence was reachable only by air or boat compared to those with access to a roadway. On average, two infants die per month. In July of 2014, this number spiked to seven infant deaths according to records maintained by The State of Alaska.

The PeaceHealth Medical Center Women’s Health Clinic in Ketchikan, Alaska decided to take on the challenge of effectively reducing these numbers. They reviewed many programs around the world and in their research discovered the Finland model. Just after World War II, the Finnish government struggled with one of the highest infant death rates in the world. They developed a program of providing all new mothers with a safe sleeping box thereby providing a safe infant sleeping environment to mothers who very often had no real home and no safe place to lay their infant to sleep. As a direct result of this program, Finland now enjoys one of the lowest rates of preventable infant death in the world. Now, after more than 75 years, this has become a strong and beloved tradition that all mothers are offered the box and its contents at no cost. PeaceHealth providers wanted to offer a similar program in their community. <http://www.bbc.com/news/magazine-22751415>.

The PeaceHealth Women’s Clinic considered the development of their own box and after much research found three companies that offered infant or baby boxes based on the Finland model. To launch the infant box program in their community, one established company’s box was evaluated. This box was designed to completely mimic the Finnish design, but the included contents were few instead of the more complete contents of the Finnish design. The clinic manager at PeaceHealth worked with the Labor and Delivery Manager at the hospital to create a more complete box and contents to launch the program for the first infant of 2015. After careful review of the box, its design, and contents, it was determined to be inadequate and other options had to be explored.

The group decided to look at other box companies and other programs. Crib programs and co-sleeper models were also reviewed and rejected. In Southeast Alaska, many mothers live in fish or logging camps or on boats. Cribs were rejected due to space limitation issues. Additionally, one program reviewed elsewhere found that many of the mothers sold the cribs instead of using them. Co-sleepers were reviewed, but the providers expressed extreme concern about a parent rolling over the baby while in the bed, one of the very things this program is designed to prevent. Due to limited data on the co-sleepers and their safety, they were also rejected. Furthermore, the shipping costs associated with cribs and co-sleepers being sent to many areas of Alaska were a very real concern.

Due to issues with the initial box design and the other programs reviewed, the group decided to evaluate a different box design and program. The second box reviewed was from Finland and this model contained the items offered by the Finnish government. This was considered, but due to funding issues

an alternative needed to be explored. Additionally, this box was similar in design to the first box which was evaluated and rejected.

The last box to be reviewed was a much sturdier design and the organization providing it was willing to customize both the contents and the aesthetic design of the box. These are important features not offered by the other companies. They also offered to work with our organization to design educational material for classes offered to new mothers upon receipt of the box.

In Alaska, language is sometimes a barrier to medical educational programs due to many parents not being able to read English or reading at a very low level. In partnership with the Division of Public Health in Alaska, Health Care Providers, Safe Sleep, and Safe and Sound Innovations, PeaceHealth developed pictographic pre and post-class educational material to use in parenting classes along with stickers and handouts that demonstrate safe sleep practices.

This program worked with the State of Alaska to reduce SIDS. As part of the program, questionnaires were developed to determine the class participant's risk of SIDS in their home and a follow-up study was developed.

Questions asked of the attendees included annual income and educational level. Information about their history of smoking, drug and alcohol use, domestic violence, and STDs were also reviewed. Additionally, an obstetrical history was obtained to help determine if any changes were occurring from previous children as compared to the new infant. Fathers were encouraged to also attend the classes.

From April until July 2015, there were a total of 33 mothers and 24 fathers or support person who had attended classes provided by this program. An additional 40+ boxes were given to other islands in our area, but were not considered part of this group and were tracked in other studies.

Out of the 33 mothers who attended the class in the first few months of the class, 31 took a box. One mother already had a crib and the other miscarried prior to delivery. One mother was given two boxes for her twins.

The attendees ranged in age from 16 to 37 with a mean age of 25. The income level was \$130,000 per year down to nine persons with no income. Eighteen of the attendees had an income of \$35,000 or less. 21 of the 33 mothers were on Medicaid at the time of the class. 4 patients reported living in remote areas and all 4 had no income or less than \$20,000 per year.

The attendees self-reported that 3 of the 33 were former smokers and 3 continued to smoke during pregnancy. 3 reported that they continued to use marijuana and 5 continued to drink alcohol during the pregnancy.

10 of the mothers reported a history of domestic violence and 12 had a history of STDs.

16 of the mothers have other children living at home. One of the mothers has a history of a SIDS death at home.

11 of the mothers and 8 of the partners missed questions on the pre-test. After the class, only one person missed a question on the post-test.

During follow-up calls, the mothers were asked if they were using the boxes and if they were satisfied with the program. Several suggestions were made to include car seat information and additional classes.

One mother reported that the box was left at a relative's house who was caring for the infant while the parents were at work. The others all report using the box and laying the baby on his/her back. In several cases where there was another child at home it was reported that the older child(ren) was/were not laid to sleep on their back and the child had co-slept with others.

Due to the great success of the program, PeaceHealth has worked with the box company to develop a uniquely Alaskan version of the box featuring art designs by a local native artist. The box program continues to grow in the community and is now being adopted in other areas of Alaska.

Additional information about this program can be found at:

<http://www.kmbc.com/article/olathe-company-bringing-finnish-baby-box-to-kansas-city/9199858>

<http://issuu.com/lbernskoetter/docs/julysept2015missourifamilyphysician> page 33

<http://www.adn.com/article/20150214/rash-sleep-related-infant-deaths-troubles-health-officials>

<http://www.wrangellsentinel.com/story/2015/09/24/news/sleep-box-program-aims-to-reduce-infant-deaths/3472.html>

http://www.sitnews.us/0217News/022617/022617_bentwood_baby_box.html and
<https://www.krbd.org/2017/02/24/baby-box-bentwood-box-donated-peacehealth/>

<http://juneauempire.com/local/2016-10-20/juneau-babies-safe-sleep-comes-box>

page 6 http://peacehealth_ketchikan.flippublication.com/Issue/E50EF2FC-A087-8FE1-FB670F80DC6A2591/Winter2016/index.html#6

<https://www.youtube.com/watch?v=0LHIEGC8W5Q>

<http://dhss.alaska.gov/dph/Nursing/Documents/2015.09.19%20Safe%20Sleep%20Baby%20Boxes%20Debut%20on%20Prince%20of%20Wales.pdf>

<https://www.adn.com/alaska-news/health/2016/07/04/alaskas-largest-maternity-center-begins-offering-free-baby-boxes-to-new-parents/>

http://www.sitnews.us/0615News/062615/062615_solestice.html

http://www.sitnews.us/0116News/010416/010416_ketchikan_1st_baby.html

<http://www.krbd.org/2016/01/05/ketchikans-new-years-baby/>

<HTTPS://WWW.ADN.COM/HEALTH/ARTICLE/RASH-INFANT-DEATHS-RELATED-SLEEPING-ALARMS-HEALTH-OFFICIALS/2015/02/15/>