SAFETY STANDARDS OF THE GRACO® PACK 'N PLAY®
VS. A CARDBOARD UNIT

At Cribs for Kids® National Infant Safe Sleep Initiative, our commitment to providing safe sleep environments to infants up to one year of age has been our focus since 1998. For safe sleep, we have chosen to provide our partners and clients a Graco® Pack 'n Play® portable playyard unit that is designed and manufactured specifically for our program, along with the Safe Sleep Survival Kit, which includes a Halo® SleepSack® wearable blanket, Philips Soothie pacifier, safe sleep educational DVD, Pack 'n Play® assembly video, Charlie's Kids Foundation "Sleep Baby Safe And Snug" book, and other educational materials about the ABCs of safe sleep, and room temperature and smoking around babies. We vetted other products and chose to use the Graco® Pack 'n Play® due to its safety record, longevity of use, and low cost. We have elected not to use a cardboard box-type unit for our infant safe sleep initiative based on the following safety concerns and quality comparisons:

1. SAFETY:
Below are product safety warnings offered by a company that is recommending cardboard boxes for babies, followed by Cribs for Kids' responses concerning potential hazards that could occur if a parent uses a cardboard box as a temporary sleeping environment. A primary safety concern is that babies will outgrow the cardboard box between two and four months of age, which is the age range during which a majority of babies are dying from accidental, sleep-related death and sudden unexpected infant death. (See CDC graph-Length-for-age and Weight-for-age percentiles). When the baby outgrows the box, it will most likely end up in bed with the parent(s) or on another unsafe surface. (See #2. Longevity below) We advise to use the cardboard box unit at your own risk.

"Always keep the cardboard box on the floor or on a sturdy wide surface such as a coffee table. Setting a cardboard box on a narrow and/or [unsturdy] surface presents a falling hazard."

C4K Recommends: A box placed on the floor can be a dangerous place for a baby to sleep. Items can fall into the box, injuring or covering the baby; young siblings and pets could have easy access inside the box; and unintentional injury can occur if an adult would accidentally trip over, or step into the box. Recently, a baby died when the owner’s pet attacked him while in a make-shift bed on the floor, said to be a laundry basket. The baby’s mother was sleeping near him on the couch. “[A] coroner plans to rule the death of a three-day-old baby boy in Youngstown, Ohio, as accidental. The newborn, identified as Aiden Grim, died after he was bitten on the head by one of his family’s five dogs. According to Dr. Joseph Ohr, the Mahoning County Forensic Pathologist, the dog, a Labrador retriever/shepherd mix, bit the baby, but did not maul, or even shake him.”

www.examiner.com/article/autopsy-reveals-that-baby-was-not-mauled-rules-infant-s-death-as-accidental

In addition, it is undetermined by the cardboard box company which type of surface is deemed ‘sturdy’ and wide enough to safely hold the unit. A cardboard box could be knocked off a coffee table, couch, dresser, or
other raised surface. The CPSC guidelines regarding the use of a portable crib / play yard / bassinet are that it must have: (1) a sturdy bottom and wide base; (2) smooth surfaces without protruding hardware; (3) legs with locks to prevent folding while in use; and (4) a firm, snugly fitting mattress. Unlike the Pack 'n Play®, or a full-size crib, a cardboard box has no legs to raise the unit off of the direct surface of the floor.

"Never use the lid while baby is inside."

C4K Recommends: It is concerning that many parents would even consider placing the lid back on top of a cardboard box while the baby is in it. A cardboard box itself does not allow for reasonable airflow for an infant, unlike the Pack 'n Play® which has air-permeable mesh sides. Putting the lid on a cardboard box would dangerously decrease the amount of oxygen in the unit and could lead to suffocation.

"Parents should cease using a cardboard box as a primary sleep space once they [babies] can pull themselves up independently."

C4K Recommends: A cardboard box should not be used once the baby is crawling, let alone before they can pull themselves up independently risk tipping the box. Even a baby that is able to roll over could potentially cause a cardboard box to become unbalanced and tip over. If a cardboard box is placed on a raised surface, this could cause severe head trauma or a life-threatening injury to the baby. With the Pack 'n Play® there is no risk of the baby toppling over the Pack 'n Play® unit, long after they can pull themselves up.

"Never lift a cardboard box with baby inside once he or she exceeds 15 lbs."

C4K Recommends: The baby’s weight can change between doctor visits. The ability to know when the exact time would be to stop lifting the baby while he/she is still in a cardboard box may not be feasible. The bassinet feature of the Pack 'n Play® can be used for a baby weighing up to 15 lbs and unable to push up on hands and knees, and the second level (bottom level) of the Pack 'n Play® will hold a baby up to, but not exceeding, 30 lbs or 35 inches tall. In addition, the Pack 'n Play® can be moved from place to place because it has wheels which provide for easy mobility.

"Keep a cardboard box away from open flame."

C4K Recommends: CPSC is committed to protecting consumers and families from products that pose a fire, electrical, chemical or mechanical hazard. CPSC’s work to help ensure the safety of consumer products - such as toys, cribs, power tools, cigarette lighters and household chemicals contributed to a decline in the rate of deaths and injuries associated with consumer products over the past 40 years. A cardboard box unit is a cardboard box and not a crib. Therefore, it has not, yet, been researched by the CPSC as a product that should be used for sleeping infants. The foam in the mattress of all Pack n' Play® is fire retardant and meets the Federal Flammability Standards. The Pack 'n Play® is not cardboard and will not easily burn when near a flame or heater.

"Do not get the box wet."

C4K Recommends: If the cardboard box company recommends that the cardboard box unit should not get wet, it poses a great concern about the durability of the unit for babies who may vomit, have leaky diapers, or spill water or milk in it. It is also recommended that a cardboard box not be used in areas with higher humidity, as it degrades the sturdiness of the cardboard. You can completely wash down the Pack 'n Play® and no part will be damaged.

"Do not transport a cardboard box while the baby is inside if any tripping hazards are present in the room (stairs, toys, rugs, etc...)."

C4K Recommends: There is no fear of a fall hazard head injury with the Pack 'n Play®. Also, since it is likely parents may try to transport a baby in the box, they might be tempted to use the box in a car. If the baby is asleep and you need to go somewhere, you might decide to just leave the sleeping baby in the box instead of strapping him/her into a car seat.
2. LONGEVITY:

"How long will the baby be able to use a cardboard box?"

**C4K Recommends:** On the website of one cardboard box company, the company recommends that “[M]ost babies are comfortable in their Baby Box until 8 months of age.” A more accurate estimate is 2-4 months. Some newborns will actually roll onto one side to sleep in their very first days, but most babies seem to lose the ability to roll onto their sides independently within the first month. By 4 months of age, babies can develop sufficient upper body strength to use his/her arms. By 6 months old, most babies have mastered not only the belly-to-back roll, but also the reverse back-to-belly maneuver.

A cardboard box may not be able to handle the weight shift caused by a baby rolling over. A typical cardboard box unit measures 26 3/4 X 16 3/4 X 11 1/2 inches. In relation, the average size baby is:

- Average length of baby at 3 months - 23 - 24.7 inches
- Average length of baby at 6 months - 25.3 - 27.2 inches
- Average weight at 6 months - 14.8 - 18.8 lbs
- Average weight at 3 months - 11.8 - 14 lbs

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Centers for Disease Control and Prevention: [http://www.cdc.gov/growthcharts/cdc_charts.htm](http://www.cdc.gov/growthcharts/cdc_charts.htm)
According to an article published in *The Washington Post*, November, 2015, “Finnish babies sleep in boxes for the first three to four months.” This is a remarkable variance from 8 months, as suggested by any cardboard box company. Most sudden unexpected infant deaths that occur in the first year are attributed to unsafe sleep environments. Babies can safely sleep in the Pack 'n Play® up to 30 lbs and 35”; well over one year of age.


### 3. WHY WE USE THE PACK 'N PLAY® FOR OUR NATIONAL INFANT SAFE SLEEP PROGRAM:

- Its safety record is **UNMATCHED**
- The Pack 'n Play® is compact, easy to assemble, and easy to transport in its carry case, making it easy to take on the go any time needed.
- When space is an issue the Pack 'n Play® serves dual purposes; it can be used when the baby is sleeping, or as a playpen for the first year of life.
- The Cribs for Kids® Pack 'n Play® mattress fabric has a higher than average air permeability rating (see chart at http://www.cribsforkids.org/graco-pack-n-play-air-permeability-statement/) The unit manufactured specifically for Cribs for Kids® is listed as “Graco Unknown.”
- Cribs for Kids® can send Pack 'n Play® to many mid-Atlantic and mid-west states served by Ohio Pitt Express.
- It is THE MOST COST EFFECTIVE UNIT FOR SAFETY, VALUE, AND LONGEVITY

### 4. VALUE:

A cardboard box unit with no additional items may cost approximately $25 ($100+ with accessories) and can only be used for approximately three to four months, barring wear and tear. The Pack 'n Play® costs Cribs for Kids Partners $49.99 and can be used for babies up to 30 and 35” and more than one year of age. Regardless of the cost difference, **babies need a safe sleep environment throughout their first year, not just the first two to four months.** When the baby outgrows the box, another SAFE sleeping environment will need to be provided. Otherwise, the baby will likely be placed in bed with the parents, siblings, or on other unsafe surfaces, such as couches and car seats.

### 5. RESEARCH:

Cardboard box companies have implied that Finland has a low infant mortality rate due to the distribution of boxes to all Finnish mothers. Finland’s low infant mortality rate is due to a combination of accessibility to healthcare (socialized medicine), education, and economic resources to provide for the family after the baby is born. Maternity leave is 105 week days, of which the mother receives 90% of her pay and then over 70% of her pay for the remaining maternity leave. Paternity leave/parental allowance may occur when maternity leave ends, which could potentially result in close to an entire year of parental care for the infant without significant financial hardship to the family.

A literature search was done for research that has actually studied the [cardboard] box to document any independent effect it has had on infant mortality. There are NO studies available to support the claims being made about the box or even the frequency with which they are actually used as a sleep surface. The media reports the success of the box in reducing infant mortality rates over a 70 year period, but they don’t offer comparisons from other countries. **Almost all countries have dramatically decreased infant mortality because of better sanitation, housing, health care, vaccinations, medications, improved standards of living, etc.** Here is a comparison of the graph quoted by companies selling cardboard boxes as safe sleeping units vs. infant mortality in the US, where boxes were never used.... the graphs are strikingly similar.
Infant mortality in Finland, 1936 to 2010 per 1,000 births

Source: Statistics Finland

FIGURE 1. Infant mortality rate,* by year — United States, 1915–1997

*Per 1000 live births.
6. NATIONAL SUPPORT:
Every year in the United States, more than 3,500 infant deaths occur due to accidental suffocation, asphyxia, or undetermined causes during sleep. Since 1998, Cribs for Kids® National Infant Safe Sleep Initiative has been making an impact on the rate of babies dying of sleep-related death in unsafe sleeping environments. Cribs for Kids® is a 501 (c)(3) organization whose mission is to prevent these deaths by educating parents and caregivers on the importance of practicing safe sleep for their babies and by providing Graco® Pack ‘n Play® portable cribs to families who, otherwise, cannot afford a safe place for their babies to sleep. All proceeds from its national infant safe sleep init
Cribs for Kids® offers parents and caregivers a wealth of infant safe sleep information on its website at www.cribsforkids.org, including an “Ask the Pediatrician” link for parents, educators, and caregivers who require more detailed answers to their questions.

On a national level, Cribs for Kids® 700+ partners across the country have forged a coalition of organizations that view success for one, as success for all. Cribs for Kids® partners do not exist in a hierarchical structure but as collaborators, whose ideas and materials are shared by all of the partners. Partners agree to adhere to certain infant safe sleep standards and, giving them the right to use Cribs for Kids® standardized forms, Cribs for Kids® name and logo, and safe-sleep materials at our discounted prices. Cribs for Kids® offers a free Toolkit to organizations interested in the collaboration which includes safe sleep educational material in English and Spanish, hold harmless agreements, parental guidelines, pre and post tests for evaluation purposes, and grant writing materials. Safe Sleep Brochures, DVDs of Public Service Announcements, and educational powerpoint presentations with up-to-date statistics will help partners spread the infant safe-sleep message in their communities. All of these materials save new partners from ‘reinventing the wheel’ and assure that a consistent safe-sleep message is being spread throughout the country.

Partners can call Cribs for Kids® for assistance on anything from getting started with their program, to raising funds, writing grants, and creating boiler-plate policies and forms that can be modified for their individual programs. Cribs for Kids is not a “crib giveaway” program; it is a national infant safe sleep education program that provides safe sleeping environments for families who, otherwise, could not afford safe places for their babies to sleep. We readily share our program and welcome others to join in our mission to.....