

# Newborn Care

Prevention and Health Education Unit  
Prepared by Licensed Health Educators



# Objectives



Know the tests that will be performed on the baby at birth.

Identify the different feeding methods.

Learn about proper baby care at home.

# Baby arrival

- **Full term birth**- after 38 weeks of gestation.
- **Premature birth** - before the 37th week of gestation was completed.
- The entire gestation process is important, however, in the last few weeks changes occur in the baby, related to the process of being able to survive outside the womb.



# Premature birth

Premature babies have low birth weight.

His organs did not have a chance to fully develop.

Therefore, they will need to stay in the hospital's Neonatal Intensive Care Unit (NICU) for a while, until their system and organs can function without help.



# Premature birth (cont.)

- Premature babies are at higher risk for serious short-term and long-term health problems, such as:
  - Difficulty of the respiratory, cardiac, and digestive systems.
  - Visual, hearing and feeding process problems.
  - Jaundice (excess bilirubin in the blood).
  - Low red blood cell count (anemia).
  - Difficulty controlling body temperature.
  - Increased risk of infections.
  - Difficulty in motor development for example, holding the head, crawling and walking.
  - Difficulty in learning, understanding and attention.
  - Aggressive behavior, anxiety or problems relating to others.



# What will happen at birth

- Until the umbilical cord is cut, the baby will be receiving nutrients from the placenta.
- Once the umbilical cord is cut, the baby will be able to resist approximately 5 hours without receiving food.
- This gives the obstetrician the opportunity to finish the delivery process and perform different tests on the baby to verify health status.
- Ideally, at birth, the baby has direct contact with mom and feeds for the next one or two hours.



# Tests to perform at birth

## Apgar test

- Quick test that is performed at the first and fifth minute after the birth of the baby.
- The score at minute 1 determines how well the baby tolerated the birth process.
- The score at minute 5 tells you how well your baby is doing outside the womb.



# Screening methods

**Blood test** - Several drops of blood are taken from the baby's heel. The blood is sent to a laboratory for analysis.

**Audiometry** – a small earpiece or microphone is placed in the baby's ear. Another method is to use electrodes that are placed on the baby's head while he or she is calm or asleep.

**Critical congenital heart disease screening**- a small sensor is placed on the baby's skin. In turn, this is connected to a machine called an oximeter for several minutes. The oximeter will measure the baby's oxygen levels.





# Vitamin K Administration

- It is performed as a preventive treatment at birth, this to avoid bleeding that could occur due to the deficiency of this vitamin. Babies are usually born with a low level of vitamin K.
- The American Academy of Pediatrics (AAP) recommends supplementing newborns with a single injection of vitamin K given intramuscularly at birth. It has been seen that this form of administration protects more than when it is administered orally.
- The World Health Organization (WHO) advises that this injection be administered after the first hour of birth to give the opportunity for skin-to-skin contact between mother and baby to occur, and to start the breastfeeding process. That is, **it is not justified to separate the newborn only to administer vitamin K.**

# Hepatitis B Vaccine

- It must be given within 24 hours of birth. After this, a second dose between the first and second month of life and the third dose between 6 and 18 months.
- The vaccine protects the baby from this disease, which attacks the liver by inflaming it.
- It is a disease that causes a moderate condition, which can last for a few weeks or can become a serious lifelong condition. It can cause liver damage, failure or cancer, or even death.
- Hepatitis B is spread when blood, semen, or other body fluids infected with the hepatitis B virus enter the body of an uninfected person. A baby can be infected during birth if the mother has hepatitis B.

# **Newborn Care: Welcome Home!**



# Safety rules when leaving the hospital in the vehicle:

The car and the protective seat in which the baby is transported must have passed the inspection of the Puerto Rico Fire Department.

Car seats have an expiration date. Avoid using seats that are more than 6 years old to ensure that they are in good condition.

Do not use previously used or thrift store car seats. They may be worn out or expired, so their protection loses effectiveness.



# Safety rules when leaving the hospital in the vehicle:

---

Before each trip, check to make sure your baby is secure in their booster seat.

---

Never leave the child sitting in the booster seat without fastening the belts.

---

Don't share seat belts. Wear a seat belt for each person in the vehicle.

---

Children should **never** ride on the lap of an adult or other children. Nor in the trunk of the car or in the cargo area of trucks (pick-ups).

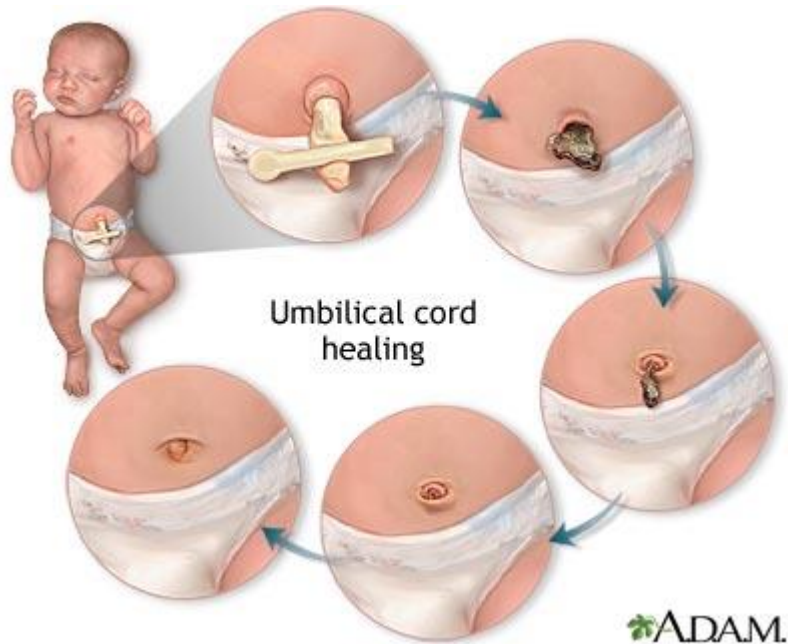


# General car seat safety rules:



- All children from birth to two (2) years old, or until they reach the weight and height indicated by the car seat manufacturer, must be facing the rear of the car. This position is the one that offers the greatest safety and protection to the baby.
- Booster seat straps must be attached at or below the shoulder. The plastic buckle of the straps should be at the level of the baby's armpits.
- The booster seat should be reclined back at an angle of 30 to 45 degrees. The car's seat belt must be properly positioned for the booster seat to stay in place.

# Umbilical Cord Care



---

When the umbilical cord is cut, a stump will remain.

---

The stump should dry out and fall off when the baby is 5 to 15 days old.

---

Keep the residual limb clean with gauze pads and water only. Keep the stump from rubbing against the diaper.

---

Do not immerse the baby in a tub of water until the stump has fallen off. While that is happening, you can bathe him with a damp cloth.

---

Let the stump fall off naturally. Don't try to pull it, even if it's just hanging by a thread.

---

If you notice that the area around your navel or stump is red or oozing, it may be an indicator of an infection. **Contact your pediatrician immediately.**

# What does baby crying mean?



Sometimes babies cry for no apparent reason, but they always want to tell us something. It can be difficult to understand what is bothering the baby. Some possible reasons include:

- **Hunger:** Newborns eat as often as every 2 to 3 hours during the day and night.
- **Pain caused by gas and/or intestinal spasms after feeding:** Pain occurs if the baby has been fed excessively or if the gas has not been removed sufficiently. The foods that a nursing mother consumes can cause gas or pain in the baby.
- **Discomfort:** such as a wet diaper.



# What does baby crying mean?(cont.)



Sometimes babies cry for no apparent reason, but they always want to tell us something. It can be difficult to understand what is bothering the baby. Some possible reasons include:

- **Colic:** Many babies between 3 weeks and 3 months of age develop a crying pattern associated with colic. Colic is a normal part of development that can be triggered by many factors and usually occurs in the late afternoon or evening hours.
- **Being hot or cold:** Babies may also cry from feeling too wrapped up in blankets or from wanting to be kept warm.
- **Too much noise, light or activity:** which can overwhelm the baby slowly or suddenly.

# Recommendations for when you are not sure about the reasons why your baby is crying

- Make sure baby is breathing easily and that the lips, fingers, and toes are warm and pink.
- Check for swelling, redness, moisture, rashes, cold fingers and toes, twisted arms or legs, bent earlobes, or compressed fingers and toes.
- Make sure baby is not hungry. Don't wait too long when the baby shows signs of being hungry.
- Make sure you are feeding the baby the right amount and passing gas the right way.
- Check to make sure the baby is not too cold or too hot.
- Check the diaper.
- Make sure there are not too many stimuli around you such as noise, light or wind.

# Stool colors



The first stool of a newborn is likely to be black. This is called meconium and it contains mucus, skin cells, and amniotic fluid. Black stools should not last more than 2 days.



It is normal to see light yellow stools in breastfed babies. When yellow stools appear much more frequently than usual and are very liquid, it could indicate diarrhea. Diarrhea can increase the risk of dehydration.



Orange stools appear due to pigments that are acquired in the baby's digestive tract. It is normal in formula-fed babies.



Once the meconium is passed, a newborn's stool may be mustard yellow in color. This stool color is also more common in breastfed babies.



White stools may indicate that the baby is not producing enough bile in his liver to help him digest food properly. A pediatrician should treat white stools at any stage.

## Stool colors (cont.)



Formula-fed babies may have stools that are a combination of gold.



Dark green stools are more common in babies who are starting to eat solid foods that are green, such as spinach and peas. Iron supplements can also turn baby stools green.



Like white stools, gray stools can mean your baby isn't digesting food the way it should. You should see your pediatrician if your baby has gray or chalky stools.



If the baby has not eaten red foods recently, call the pediatrician. If she has eaten red foods, watch to see if her stool returns to normal color when she has another bowel movement. If not, call the pediatrician.

# Bath time



Place the baby where wind currents do not enter.

Have everything you need before giving your baby a bath.

Use lukewarm water, never hot.

Start from head to toe.

Don't rinse your baby with the same water you bathed him in.

When finished, wrap the baby in the towel and after drying, put the diaper and clothes on.

# Details about the sleep period



They sleep for periods of 2 to 4 hours.

Put the baby on his back to sleep.

Remove any soft objects from the baby's crib, including quilts, comforters, stuffed animals, cushions and pillows to prevent snagging and suffocation on them.

When putting the baby to bed, be sure to alternate the position of his head, resting it on the right side and then on the left on consecutive nights to avoid flattening one side of his head.

# Types of feeding for babies



During the first 4 to 6 months of life, babies need only breast milk or formula milk to meet all their nutritional needs.

# General recommendations for baby feeding

Babies should be fed on demand, so it can happen between 8 to 12 times a day.

If you use formula milk, do not overfeed your baby. Follow the pediatrician's instructions.

Support your newborn baby's head so that it is higher than his stomach when you feed him.

Do not use the microwave to heat milk. Place the bottle in a pot of warm water for a few minutes.

If the baby is using medication, consult the pediatrician to find out when it is appropriate to administer them.

Prevent infections, keep the home clean.





Breast milk contains beneficial antibodies to keep babies healthy and protected from infection.

Be sure to disinfect all surfaces and wash your hands with soap and water before and after touching the baby.

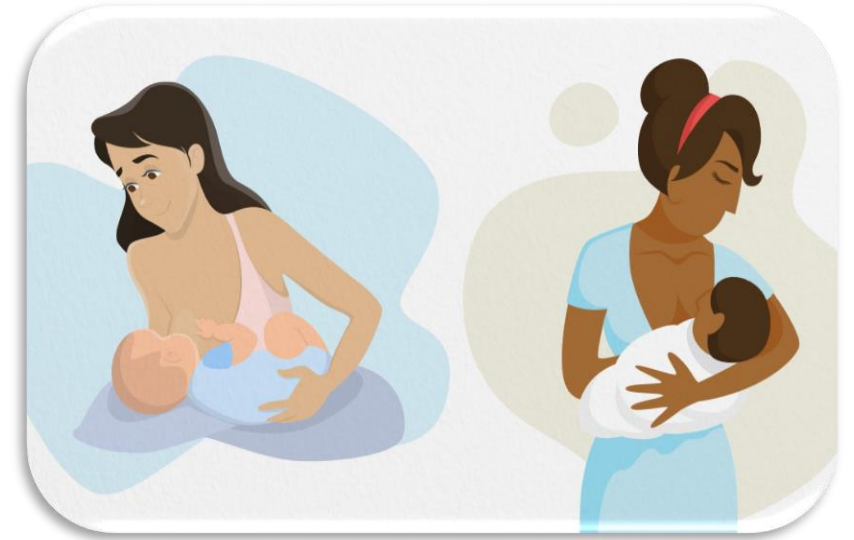
To date, the transmission of active cases of COVID-19 through breast milk has not been detected.

The WHO recommends extending breastfeeding until the baby is 2 years old.

When the baby is 6 months old, you can continue with breast milk and add solid foods when recommended by the pediatrician.

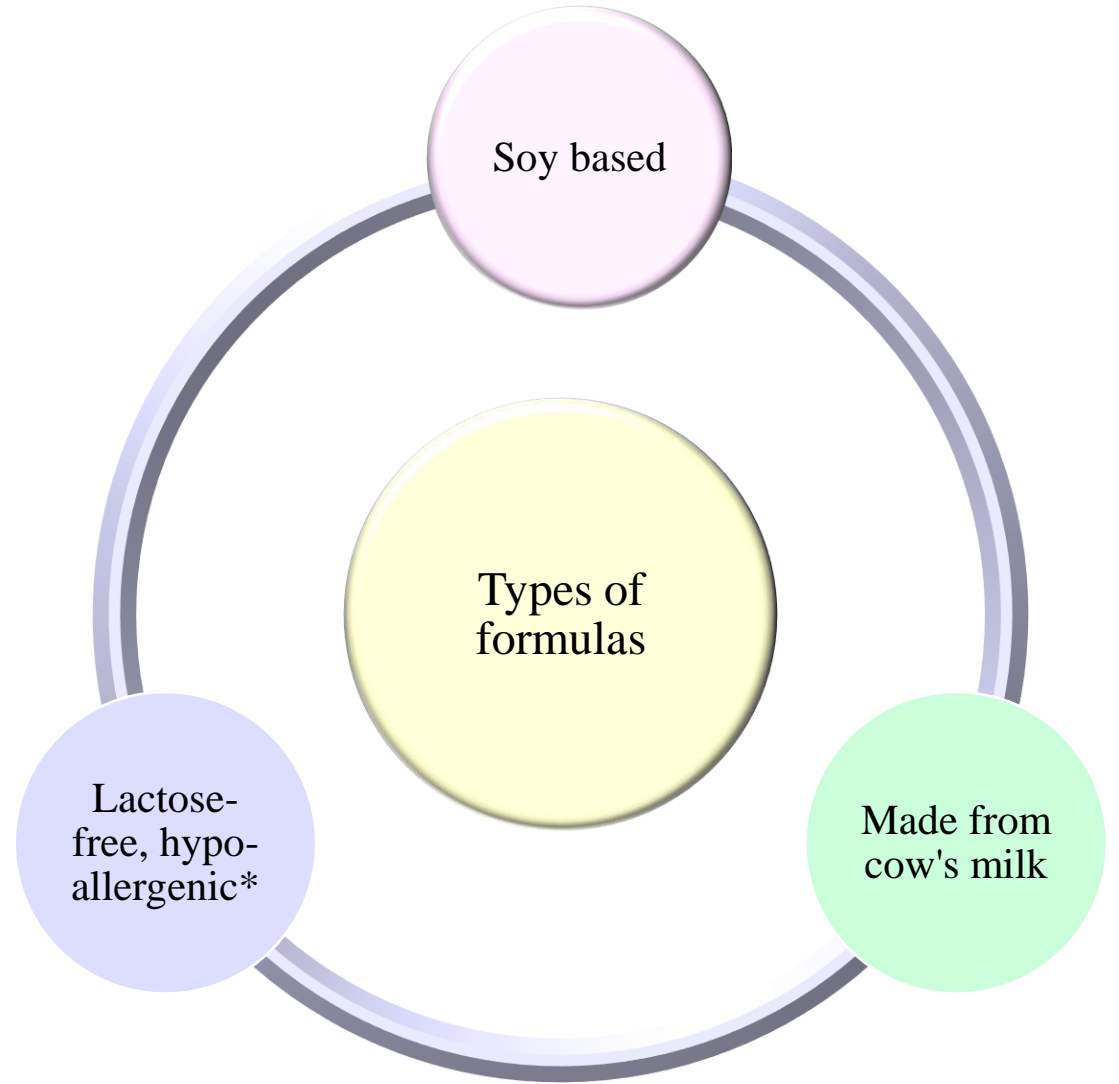
Studies show that breastfeeding helps the baby's physical, cognitive, emotional and social development.

# Breastfeeding



# Infant formulas

Baby formulas come in different forms such as powders and ready-to-use concentrated liquids. Iron is an important component for the development of babies. It's best to use an iron-fortified formula (unless otherwise directed by your pediatrician).



# Shaken Baby Syndrome

---

It is a type of brain trauma that occurs when a baby is violently shaken. The baby's neck muscles are weak, and his head is large and heavy.

---

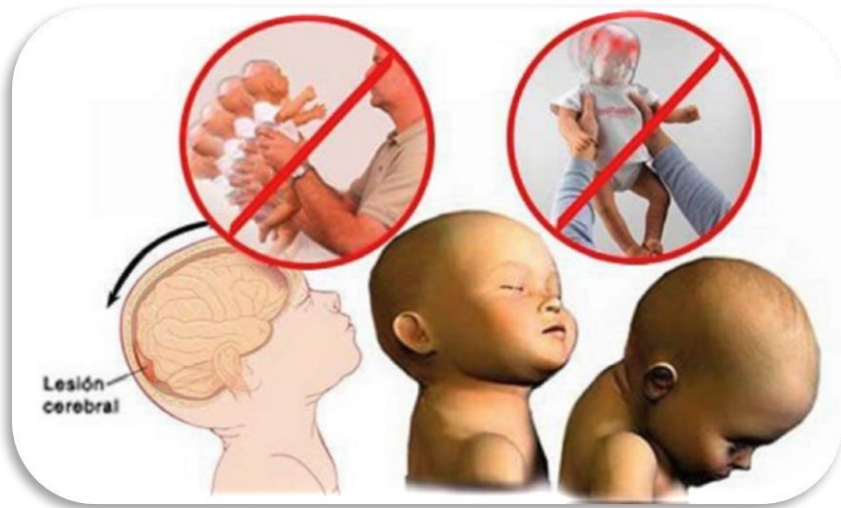
The jolts cause the fragile brain to bounce back and forth inside the skull, causing contusions, swelling and bleeding, which can cause serious permanent brain damage and even death.

---

The characteristic injuries of shaken baby syndrome are hemorrhages within the brain, hemorrhages in the eye within the retina, damage to the spinal cord and neck, as well as fractures of the ribs and other bones.

---

Signs a baby shows when shaken include extreme irritability, lethargy, loss of appetite, breathing problems, seizures, vomiting, and pale or bluish skin. Shaken baby injuries usually occur in children younger than 2 years of age but can be seen in children up to 5 years of age.



# Signs of Adequate Development

From the birth of the baby until the first 5 years, the following areas must be developed:



## Motor skills

control head, sit and walk



## Primary motor skill

hold a spoon, hold a piece of cereal with one finger and thumb.



## Sensory

see, hear, taste, touch and smell.



## Language

be able to speak, be understood and understand what parents, caregivers or other children say.



## Social

skills to play with family members and other children.

Babies do not develop at the same rate. Your baby may arrive early in some areas and a little later in others. If you are concerned about possible delays, check with your pediatrician.

# What is the difference between immunization and vaccination?

- Immunization is the process by which an immune response is obtained, that is, the body achieves resistance to a specific disease.
- One of the ways that immunization occurs is through vaccination. Vaccines are the safest and most effective way to prevent disease, disability, and even death.
- Vaccines contain dead or weakened germs, or parts of their structure, that cause a particular disease.
- Weeks after birth, babies have some immune protection. This is transmitted from the mother's body to the baby through the placenta during pregnancy.
- After a short time, this protection wears off, so the vaccines will help protect the baby against many diseases.



# Recommended vaccines for babies:



- **DTaP:** Tetanus, diphtheria, and whooping cough can be very serious illnesses. It is safe to get the DTaP vaccine at the same time as other vaccines, even for babies. They should be given five doses of the vaccine at the following ages: 2, 4, 6 months, 15-18 months, and 4-6 years.
- **Poliomyelitis (Polio) IPV:** is a viral disease that can affect the spinal cord causing muscle weakness and permanent paralysis and even death. However, the vaccine prepares the child to fight the virus. Most children who receive all the recommended doses of the vaccine will be protected against the virus.
- **Mumps:** is a contagious disease caused by a virus. It is easily spread by coughing and sneezing. There is no cure, and it can cause long-term health problems. The vaccine protects against mumps and is an injection that combines vaccines against three diseases: measles, mumps and rubella.

# Recommended vaccines for babies: (cont.)



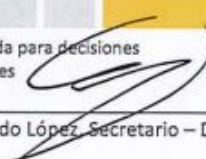
- **Chickenpox** is an illness caused by a virus that causes a rash, fever, and can be severe. Some children who have received the vaccine may get chickenpox, but it is usually very mild.
- **Meningococcus (MCV4):** Frequently strikes without warning, even in apparently healthy people. Protects against bacterial meningitis. Two doses are recommended: the first between 11 and 12 years and the second at 16 years.
- **Hepatitis:** is a disease that causes inflammation in the liver. It can lead to liver failure, joint pain, complications in the kidneys, pancreas, blood, and even death. The vaccines protect against types of hepatitis A and B.
- **Influenza (Flu):** respiratory infection caused by a virus. The vaccine protects against the virus and must be given annually.



### ITINERARIO DE VACUNACION PARA NIÑOS Y ADOLESCENTES 2022 EIDADES O A 18 AÑOS

VACUNA	BIRTH	1 MES	2 MESES	4 MESES	6 MESES	9 MESES	12 MESES	15 MESES	18 MESES	19-23 MESES	2-3 AÑOS	4-6 AÑOS	7-10 AÑOS	11-12 AÑOS	13-15 AÑOS	16 AÑOS	17-18 AÑOS
Hepatitis B (Hep. B)	1 dosis	← 2da dosis →		← 3ra dosis →													
Rotavirus (RV) RV1 (Serie 2 dosis) RV5 (Serie 3 dosis)			1ra dosis	2da dosis	Ver nota al calce												
Difteria, tétanos y pertusis acelular (DTaP:<7años)			1ra dosis	2da dosis	3ra dosis			← 4ta dosis →				5ta dosis					
Haemophilus influenzae tipo b (Hib)			1ra dosis	2da dosis	3ra dosis		3ra o 4ta dosis ver nota										
Neumococo Conjugado (PCV13)			1ra dosis	2da dosis	3ra dosis		← 4ta dosis →										
Polio Inactivado (IPV:<18años)			1ra dosis	2da dosis	← 3ra dosis →						4ta dosis						
Influenza (IIV) ó Influenza (LAIV)					Vacunación Anual 1 o 2 dosis								Vacunación Anual 1 dosis		Vacunación Anual 1 dosis		
Sarampión Común, Sarampión Alemán, Paperas (MMR)					Ver Nota		← 1ra dosis →					2da dosis					
Varicela (VAR)							← 1ra dosis →					2da dosis					
Hepatitis A (Hep. A)					Ver Nota		← Serie 2 dosis, ver nota →										
Tétanos, difteria, pertusis acelular (Tdap: ≥7años)														1ra dosis			
Virus Papiroma Humano (VPH)															Ver Nota		
Meningococo - MenACWY-D≥9meses; MenACWY-CRM≥2meses)													1ra dosis		2da dosis		
Meningococo B													Ver Nota				
Neumococo polisacárida (PPSV23)													Ver Nota				
Dengue (DEN4CYD; 9-16)													Seropositivo en Áreas Endémicas (Ver nota)				

   Edad recomendada para todos los niños   
    Edad recomendada para alcanzar a aquellos con vacunación incompleta   
    Recomendaciones para grupos de alto riesgo   
    Edad recomendada para decisiones clínicas individuales   
    No recomendación

  
 Dr. Carlos Mellado López, Secretario – Departamento de Salud



# Emotional changes you may experience with the arrival of your baby



Postpartum blues may last for the first two weeks.

Postpartum depression can be diagnosed up to a year after pregnancy.

Seek help right away if you feel sad or have negative thoughts.

# You can contact:

## **Medical Advice Line**

1-844-347-7801

TTY/TDD: 1-844-347-7804

Available 24 hours a day, 7 days a week

## **Customer Service Line**

1-844-347-7800

TTY/TDD: 1-844-347-7805

Monday to Friday 8:00 a.m. – 5:00 p.m.



# Questions or Comments



# References:

- Kids Health. *Guía para padres primerizos*. Recuperado de:  
[http://kidshealth.org/parent/en\\_espanol/embarazo/guide\\_parents\\_esp.html](http://kidshealth.org/parent/en_espanol/embarazo/guide_parents_esp.html)
- Medline Plus. *Nacimiento vaginal-Serie procedimiento (sexta parte)*. Recuperado de:  
[https://medlineplus.gov/spanish/ency/esp\\_presentations/100198\\_8.htm](https://medlineplus.gov/spanish/ency/esp_presentations/100198_8.htm)
- Medline Plus. *Prueba de detección para recién nacidos*. Recuperado de:  
<https://medlineplus.gov/spanish/ency/article/007257.htm>
- Medline Plus. *Examen del recién nacido*. Recuperado de:  
[https://medlineplus.gov/spanish/ency/esp\\_imagepages/9074.htm](https://medlineplus.gov/spanish/ency/esp_imagepages/9074.htm)
- Medline Plus. *Bebé prematuro*. Recuperado de: <https://medlineplus.gov/spanish/prematurebabies.html>
- Medline Plus. *Llanto en la lactancia*. Recuperado de:  
<https://medlineplus.gov/spanish/ency/article/002397.htm>

# References:

- Health Line. *Tabla de colores de las heces*. Recuperado de: <https://www.healthline.com/health/es/color-de-las-heces-en-bebes#tabla>
- Medline Plus. *Fórmulas para lactantes*. Recuperado de: <https://medlineplus.gov/spanish/ency/article/002447.htm>
- Medline Plus. *Parto Prematuro*. Recuperado de: <https://medlineplus.gov/spanish/ency/patientinstructions/000486.htm>
- CDC. *Lactancia y cuidado del recién nacido si tiene COVID-19*. Recuperado de: <https://espanol.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/pregnancy-breastfeeding.html>
- ACAA.Gobierno PR. *Asiento Protector*. Recuperado de: <http://www.aaa.gobierno.pr/asiento-protector>



Code to access the evaluation of the Event

# Thanks for your participation

For more information: [mas@firstmedicalpr.com](mailto:mas@firstmedicalpr.com)



¿Ayuda con su Plan de Salud del Gobierno?



Línea libre de cargos  
**1-800-981-2737**  
**TTY 787-474-3389**