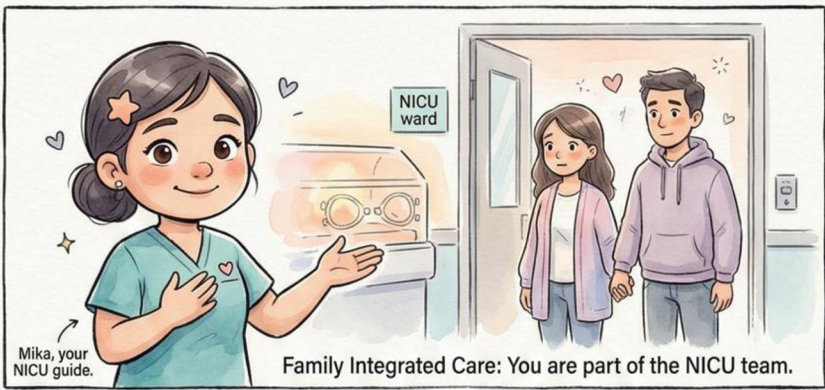


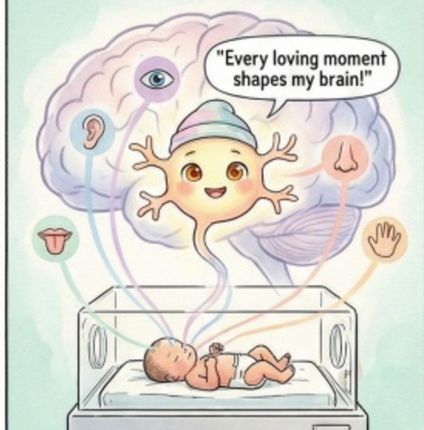
PARENTAL GUIDE:  
**GUIDE TO NEWBORN  
BRAIN HEALTH:**  
*Understanding Care &  
Development in the NICU*



A Resource for Families – Empowering Your Journey



## Neuroplasticity in the NICU



## Touch & Breastfeeding



## Hearing: Parent's Voice & Music



## Sight: Gentle Light, Faces, and Focus



## Smell & Odour



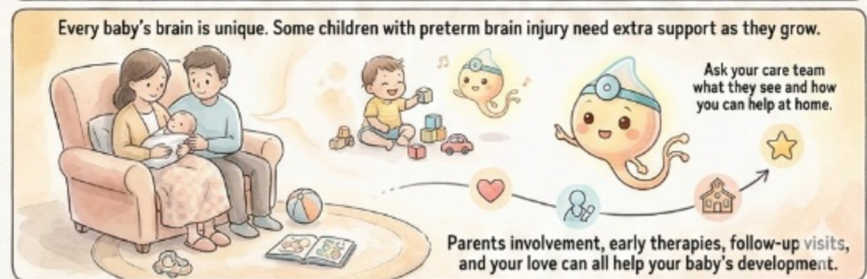
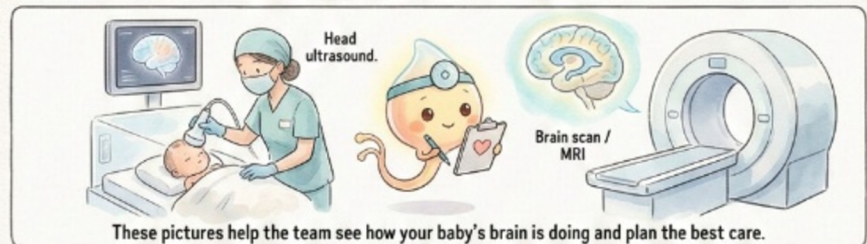
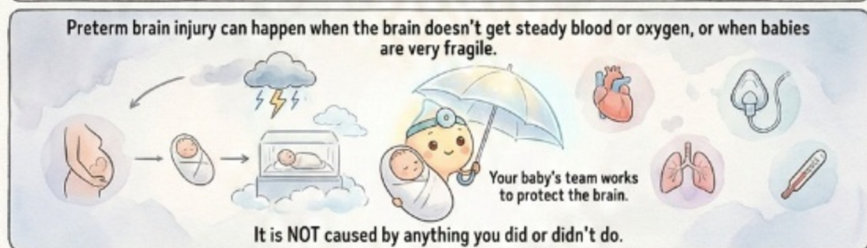
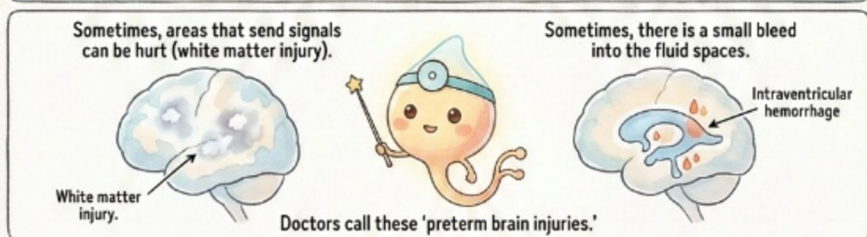
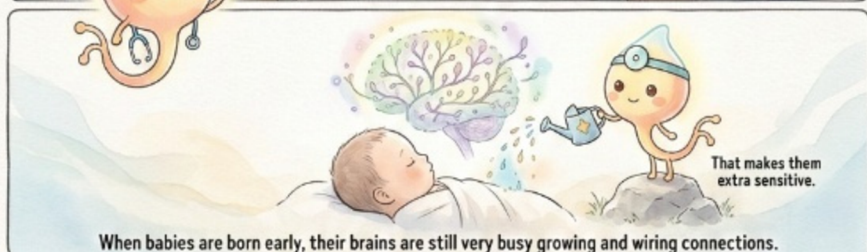
## Every small moment matters.



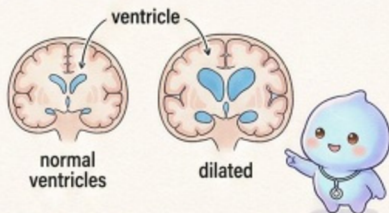
## Sleep & Quiet Protection



## Understanding Preterm Brain Injury

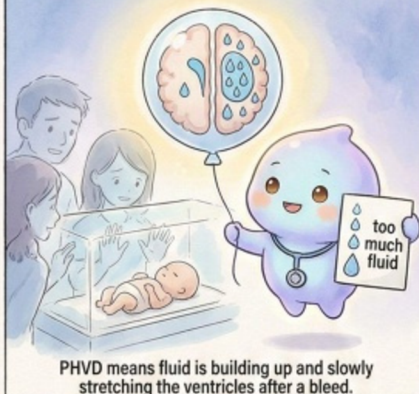


## What is happening in my baby's brain?



Sometimes, after bleeding in the brain, extra fluid can stretch the spaces called ventricles.

## Post-hemorrhagic ventricular dilation (PHVD)



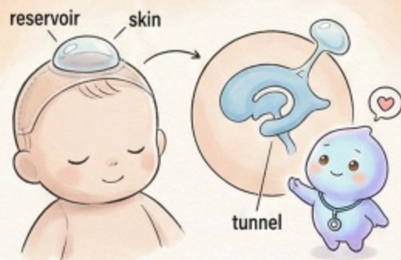
PHVD means fluid is building up and slowly stretching the ventricles after a bleed.

## Why doctors may remove some fluid (LP)



A lumbar puncture (LP) lets doctors gently remove some fluid from the lower back to lower pressure.

## Putting in a small reservoir



Sometimes doctors place a little reservoir under the scalp to make removing fluid easier and gentler.

## Tapping the reservoir



With a tap, doctors can drain a little fluid through the reservoir to help relieve pressure.

## Watching closely and adjusting care



Your baby's team watches ultrasound scans and your baby's signs to decide when and how much fluid to remove.

## You are part of the team

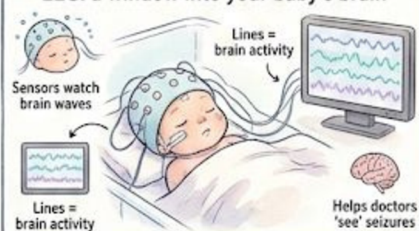


Ask questions, share your worries, and stay close. You and the care team work together to protect your baby's growing brain.

# “Your baby has seizures – the team is watching closely”



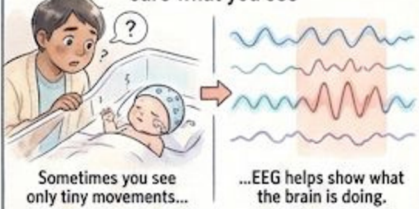
## EEG: a window into your baby's brain



## Doctors learn which patterns are seizures.



## EEG shows seizures, even when you're not sure what you see



## Treatment: medicines + close monitoring



## You are an important part of the care team



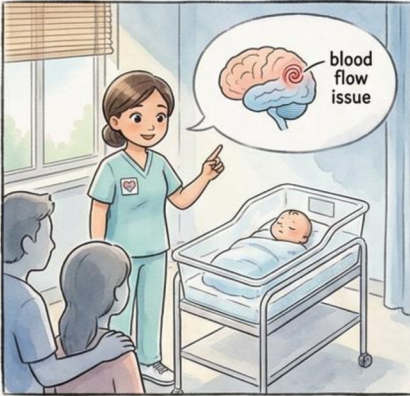
## Your baby's seizure plan is a journey



## Monitors & EEG watch the brain. You watch over your baby.



## What is a neonatal stroke?



Neonatal stroke: a problem with blood flow in a newborn's brain.

## Possible causes



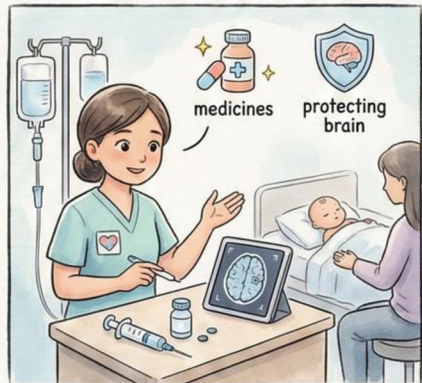
Not your fault. Most strokes are not predictable or preventable.

## How do doctors notice and monitor it?



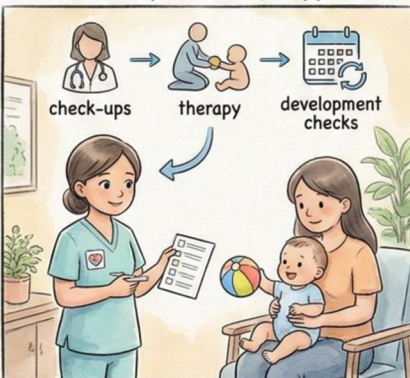
Doctors and nurses watch closely, use scans and tests to check the brain.

## Treatment in the hospital



Treatment depends on each baby. Doctors try to protect the brain, treat complications, and prevent more strokes.

## Follow-up and early support



Regular follow-up helps track growth, movement, learning, and speech.

## Parental role & hope



You are a key part of your baby's team. With care and support, many babies grow and learn in their own beautiful way.

## What is HIE?



HIE means the baby's brain didn't get enough blood supply including oxygen for a short time.

## What happens in the brain?



Without enough oxygen, other essential nutrients, brain cells can be hurt.

Cooling slows the brain's activity, a bit like a safe, gentle hibernation.

## Why cooling can help (like a gentle hibernation)



Lowering the temperature helps reduce risk of brain injury.

This is called therapeutic hypothermia.

## How the cooling is done

Baby is cooled carefully and watched closely.

Heart, breathing, and brain activity are monitored.



## Time and safety



Cooling usually happens over several days.

Nurses and doctors watch your baby all the time.

## After cooling – what parents might see

Doctors will check how your baby is growing and developing.

You are part of the care team.



## Reassurance and support



You are not alone. Ask questions, share worries, and lean on your care team.

# Your Baby's Brain MRI: A Parent's Guide

## What is an MRI?



- A scan that uses a strong magnet and radio waves
- Shows clear pictures of your baby's brain
- No X-rays, no radiation



## Why does my baby need a brain MRI?



- To get detailed pictures of your baby's brain
- Guides diagnosis and care
- Helps when other tests are not enough

## What will happen during the scan?



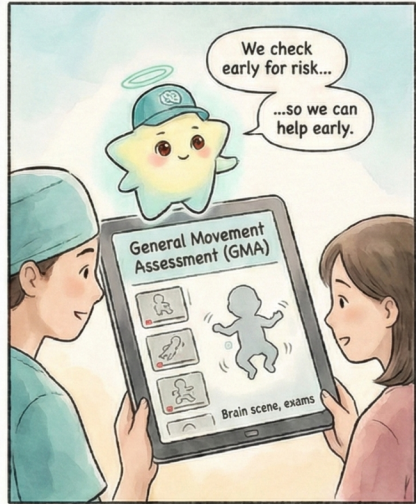
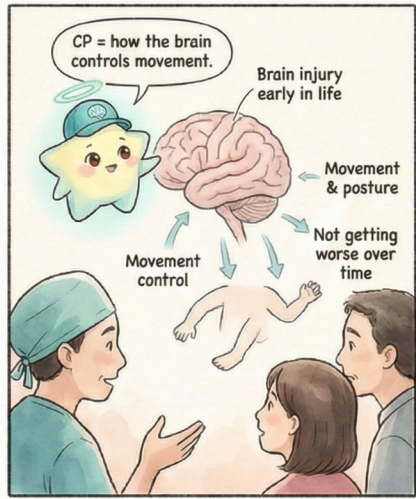
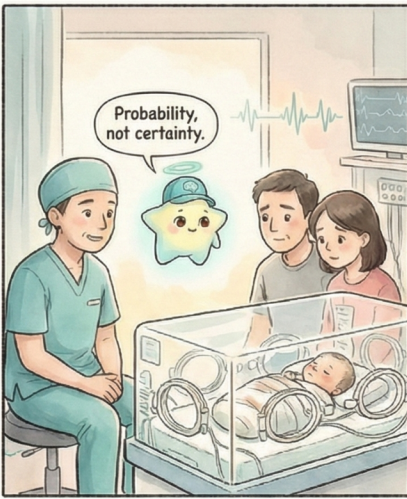
- Your baby is fed and gently wrapped (feed-and-wrap)
- Soft ear protection for loud scanner sounds
- We monitor your baby throughout



## Is it safe?



- Yes, it is very safe
- No ionizing radiation
- Our team ensures your baby's comfort



# *YOUR JOURNEY, OUR SHARED HOPE.*



*Every step, every touch, and every moment of care shapes your baby's incredible brain. You are not alone in this journey. With love, patience, and dedicated support, your child's potential is boundless. Trust in your strength and the village around you.*

**SOURCES & RESOURCES:** HIE, Preterm Brain Injury, Seizures, Stroke, Neuroplasticity, Family Care.

A Resource for Families – Empowering Your Journey.