Caregivers can also support their babies' early learning and development. They should ask their health care providers about activities they can do at home (therapeutic early stimulation activities).

### How can caregivers manage stress?

When parents find out their baby is affected by congenital Zika syndrome, they may experience very strong emotions, such as grief, fear, guilt, and isolation. These are all normal responses. Taking care of a child with complex medical and developmental challenges may be very stressful, and managing this stress is important for the health of caregivers and families.

- Talk to a counsellor, medical social worker, or psychologist. They should be part of your specialist team as well. Please do not hesitate to ask for this service.
- Form or join a support group with other caregivers.
- Find healthy ways to express your feelings (e.g., art, writing poems, drama).
- Take opportunities for exercise and relaxation (e.g., breathing exercises).
- Avoid using tobacco, alcohol, or other drugs to relax.

## Is there any way to prevent congenital Zika syndrome?

The only way to prevent congenital Zika syndrome is to prevent ZIKV infection. This is done by protecting oneself from mosquito bites and getting rid of mosquito breeding sites (i.e., standing water). One can also prevent sexual transmission of Zika by using condoms or not having sex. There is no vaccine at this time to prevent ZIKV infection. More information is available from your local health facility on how to prevent ZIKV infection.

#### Sources:

US Centers for Disease Control and Prevention: Zika – Microcephaly and Other Birth Defects https://www.cdc.gov/zika/healtheffects/birth defects.html

If you have concerns about your child's health, growth, or development, seek more information from the health centre in your area and the Ministry of Health.



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This information is made possible by USAID and the Maternal and Child Survival Program and does not reflect the views of USAID or the United States Government.

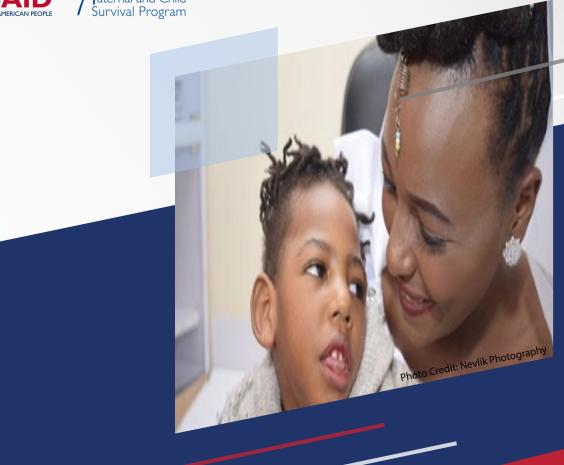




# Congenital Zika Syndrome







# WHAT IS CONGENITAL ZIKA SYNDROME?

A birth defect is a type of health condition present at birth that includes abnormal differences in a baby's body. Birth defects can cause problems with development and overall health. Congenital Zika syndrome is a group of birth defects caused by infection with the Zika virus (ZIKV) that took place in pregnancy, whether or not the woman knew she was infected with ZIKV. Babies with congenital Zika syndrome may also have other serious health and developmental problems.

### How does congenital Zika syndrome occur?

- ZIKV is passed to a pregnant woman by an infected mosquito or through sexual transmission.
- The virus may then pass through the placenta to the baby.
- ZIKV infection damages the normal development of the baby.
- The chance of severe birth defects is greatest if ZIKV infection took place in the first trimester (first 13 weeks of pregnancy), when most of the baby's organs are still being

## What are the features of CZS that may occur?

- Severe microcephaly (smaller-than-normal head)
- Decreased brain tissue and specific patterns of brain damage
- Damage to the back of the eye in the areas needed for clear vision
- Hearing problems
- Limb deformities, including clubfoot and other problems
- Nervous system problems, including seizures
- Difficulty swallowing and feeding
- Developmental delays
- Sometimes no detectable features are immediately apparent.

# How are babies with possible congenital Zlka syndrome evaluated?

- A thorough physical examination is done, including careful measurements of the head and body.
- When an infant is born with defects suggesting congenital Zika syndrome to a woman who was potentially infected with ZIKV during pregnancy, the infant should be tested for ZIKV infection.
- A blood test is done soon after birth to check for ZIKV infection.
- Other special imaging tests, such as ultrasound, may be done to check the baby's brain.
- Additional blood tests may be done to be sure that a small head size and other features of congenital Zika syndrome are not due to other conditions that can cause similar problems.
- Hearing and vision screenings are conducted.

### What treatments can help babies with congenital Zika syndrome?

There is no known cure for congenital Zika syndrome. Families can work with their team of health providers to manage the baby's conditions and coordinate care. A baby with congenital Zika syndrome requires regular checkups and immunizations, and care from specialists with the qualifications and experience necessary to care for the problems associated with congenital Zika syndrome. Several kinds of specialist care may be needed, including:

- Audiologist (hearing specialist)
- Developmental behavioural paediatrician (specialist in medical and developmental issues of children)
- Gastroenterologist (specialist in the digestive system)
- Neurologist (specialist in the brain and nervous system)
- Ophthalmologist (eye specialist)
- Orthopaedic (bone/joint) specialist

The conditions seen with congenital Zika syndrome may affect growth, development, and behaviour. Since congenital Zika syndrome may lead to delays in development (movement, talking, listening, learning, doing daily activities, and getting along with others), it is best to receive early intervention to help with skill development. Several different types of professionals may be able to assist families:

- Early intervention therapists can help children from birth to 3 years old learn important skills.
   Services might include therapy to help the child talk, walk, and interact with others.
- Occupational therapists help people participate in the things they want and need to do through the therapeutic use of everyday activities. Services may include helping a family to adapt the child's environment.
- Physiotherapists are movement experts who optimize quality of life through prescribed exercise, hands-on care, and patient education.
   Services may include treatment techniques to promote the baby's ability to move and prevent further disability.
- Speech/language pathologists are experts in communication. Services may include treatments to address different types of communication and swallowing problems.
- Special educators make recommendations about learning strategies and accommodations for children. Services may include helping families or teachers use special devices or technology to help children learn.







by with Typical Head Size

Baby with Microcephaly Baby wi

Photo Credit: Centers for Disease Control and Prevention