



# Helping ASHAs Identify Birth Defects

**RBSK**

राष्ट्रीय रोग निवारण कार्यक्रम  
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-FROM SURVIVAL TO HEALTHY SURVIVAL-

## Introduction

**R**ashtriya Bal Swasthya Karyakram (RBSK) is an important initiative launched by the Ministry of Health and Family Welfare under National Health Mission to promote child health screening and early intervention services. The programme aims at early detection and management of 30 identified health conditions (Categorized as 4Ds – Defects at Birth, Deficiencies, Diseases and Developmental delays including disabilities) prevalent in children. RBSK covers all children from birth to 18 years of age.

Birth defects result from a variety of factors and cause physical malformations in the baby. Some of these are visible at the time of birth. In this handbook you will learn about some common birth defects, how to recognize them and what advice needs to be given to the parents, where such children are to be referred and what actions are to be taken.

As an ASHA you have the opportunity to recognize such defects and enable prompt action by the family. One of your key responsibilities is to provide home based care for the new-born, through visits to the new-born from the first day of birth until the first six weeks. It is during this period that you can pick up birth defects. Early identification of such children will help you to mobilize the family to seek intervention at the nearest referral centre.

This handbook consisting of a pictorial presentation of various birth defects will help you in early identification. Under the Rashtriya Bal Swasthya Karyakram, there are facilities to provide support to such children. Other facilities under RBSK include screening by dedicated mobile health teams for the age group 6 weeks to 6 years at anganwadi centres.

## Defects at Birth

### 1. What are “Defects at Birth”?

- ⊙ A “birth defect” is a health problem or physical change, which may be present in a baby at the time of birth.
- ⊙ Birth defects can be mild, where the baby looks and acts like any other baby or birth defects may be very severe.
- ⊙ Some birth defects, affect one organ while others affect multiple organs of the body.
- ⊙ A few birth defects are easy to identify and some others cannot be identified, without the help of a doctor or medical tests.

Cleft Lip & Palate



Club Foot



Down's Syndrome



Neural Tube Defect

### 2. Why is it important to identify the “Defects at Birth” at the earliest?

- ⊙ Early detection and management of birth defects can help a child lead nearly normal life.
- ⊙ Many physical defects, if detected early, can be treated with surgery, (cleft lip or palate, and certain heart defects.)

## Key Messages

- ⦿ Motivate Pregnant women to take folic acid rich food like green leafy vegetables, liver and pulses.
- ⦿ Marriage among close relatives must be avoided, especially in families with a history of birth defects.
- ⦿ Regular Antenatal checkup at least three times during pregnancy
- ⦿ Minimize unnecessary medicines except those prescribed by ANM or medical officer
- ⦿ Avoid exposure to radiation (X-rays) and smoking/alcohol in pregnancy
- ⦿ Family members to maintain positive environment at home by avoiding any maternal stress and domestic violence
- ⦿ Personal hygiene and safe sex practices can prevent infection during pregnancy.

## Identifying Defects at Birth

### NEURAL TUBE DEFECT

Neural Tube Defects (NTDs) are serious congenital defects of the spinal cord, skull and brain

#### LOOK FOR:

- ⦿ Swelling at the back or behind the head
- ⦿ Any discharge from the swelling
- ⦿ Difficulty in moving legs
- ⦿ Constant leakage of stool, through the anal opening

#### IF ANY SUCH FINDING IS PRESENT:

- ⦿ Use clean and dry clothes to cover the swelling
- ⦿ Advise mother to continue to breast feed
- ⦿ Refer to district hospital



## Key Messages

- ⦿ Advise pregnant women to eat foods rich in folic acid like green leafy vegetables, pulses to prevent neural tube defects.
- ⦿ Strictly avoid smoking/alcohol at any time and in any amount during pregnancy.

# DOWN'S SYNDROME

Down's syndrome is a disorder causing physical abnormalities like short stature and a broad flat face and mental slowness.

## LOOK FOR:

- ⊙ Child appearing "floppy" i.e., head, body and hand hanging loosely
- ⊙ Head smaller than normal for same age group or abnormally shaped
- ⊙ Flat face with:
  - Upward slanting eyes (may be normal in some parts of the country)
  - Inner corner of the eyes rounded instead of pointed.
  - Small and deformed ears
  - Small mouth
  - Flattened nose
- ⊙ Single deep crease across the centre of the palm
- ⊙ Fifth finger has one bending joint instead of two
- ⊙ Wide, short hands with short fingers
- ⊙ A big space between the first and second toe (sandal gap)
- ⊙ Below average weight and length at birth
- ⊙ Enlarged appearing tongue in relationship to size of mouth

## IF ANY SUCH FINDING IS PRESENT:

- ⊙ Refer to district hospital/nearest referral facility



## Key Messages

- ⊙ With early intervention i.e., within the first three months, children with Down syndrome can lead a near independent life
- ⊙ Examination of eye, teeth, hearing and thyroid of the child should be done regularly
- ⊙ Special care of the child's neck and spine (avoid sudden movement to the neck)
- ⊙ The child's speech can be improved if the parents are supported by a speech therapist

## CLEFT LIP AND PALATE

### CLEFT LIP:

Physical split or separation of the two sides of the upper lip.

### CLEFT PALATE:

Split or opening in the roof of the mouth

### BOTH CLEFT LIP AND PALATE:

### LOOK FOR:

- ⊙ Food and liquids coming out through the nose
- ⊙ Difficulty in sucking
- ⊙ Nasal tone of voice

### IF ANY SUCH FINDING IS PRESENT:

- ⊙ Refer to district hospital/nearest referral facility



## Key Messages

- ⊙ Cleft lip and palate can be corrected by performing timely surgeries
- ⊙ By 2-3 months of birth, surgery should be performed to close the cleft lip; Cleft Lip should be corrected before the child speaks
- ⊙ Cleft palate surgery should be performed between 12 to 18 months of age

## CLUB FOOT

Clubfoot is a congenital deformity that twists the foot, ankle and toes

### LOOK FOR:

- ⊙ Inward turning of the front of the foot
- ⊙ Downward-pointing toes
- ⊙ Child rests foot on its outer border
- ⊙ Rigidity in movements of the foot i.e., the foot cannot be moved towards the front portion of the leg
- ⊙ Tightened heel
- ⊙ Sole facing each other

### IF ANY SUCH FINDING IS PRESENT:

- ⊙ Refer to district hospital/nearest referral facility



## Key Messages

- ⦿ Early detection and correction is important for child's development
- ⦿ If not treated at an early stage, this deformity can lead to lifetime disability
- ⦿ Treatment should start right at birth through continuous plastering (5-6 plaster casts)
- ⦿ The mother should not try to correct the foot by pushing the sole towards the floor

## CONGENITAL CATARACT

Normally the eye has three circles: the inner circle is black, the next one is brown/green, and the outer one is white

A congenital cataract is a clouding of the lens (the inner circle) of the eye that is present at birth

### LOOK FOR:

- ⦿ Grey or white colouring the inner circle of the eye instead of black
- ⦿ Does not close the eye to sudden bright light
- ⦿ Does not look towards the face of the person holding the child (No eye contact with the mother)

### IF ANY SUCH FINDING IS PRESENT:

- ⦿ Refer to district hospital/nearest referral facility



## Key Messages

- ⦿ This needs immediate referral, otherwise the child would become permanently blind
- ⦿ If not corrected, the blindness would also affect the learning ability of the child

## CONGENITAL DEAFNESS

Congenital deafness is hearing loss which is present since birth

### LOOK FOR:

- ⦿ Family history of deafness; History of jaundice during new-born period, which required treatment: if yes, refer the child
- ⦿ Child does not get startled/cries/blinks in response to loud sounds
- ⦿ Child does not awaken at loud sounds
- ⦿ Child does not quieten when spoken to
- ⦿ Look for any improper formation of external ear

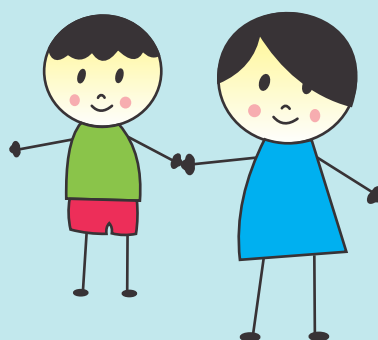
### IF ANY SUCH FINDING IS PRESENT:

- ⦿ Refer to district hospital/nearest referral facility



## Key Messages

- ⦿ Take the child for a hearing test at the District Hospital
- ⦿ Early management of hearing loss is important as it affects speech development
- ⦿ Reduce exposure to loud noise
- ⦿ Hearing devices, such as hearing aids and speech therapy can help in hearing
- ⦿ Every child has the ability to speak. Hence if a child's deafness could be confirmed by the age of 9 months and hearing aids provided before 2 years, the child could be prevented from becoming dumb



## Selected Health Conditions for Child Health Screening & Early Intervention Services under RBSK (4Ds)

### Defects at Birth

1. Neural tube defect
2. Down's Syndrome
3. Cleft Lip & Palate / Cleft palate alone
4. Talipes (club foot)
5. Developmental dysplasia of the hip
6. Congenital cataract
7. Congenital deafness
8. Congenital heart diseases
9. Retinopathy of Prematurity

### Deficiencies

10. Anaemia especially Severe anaemia
11. Vitamin A deficiency (Bitot spot)
12. Vitamin D Deficiency (Rickets)
13. Severe Acute Malnutrition
14. Goiter

### Child hood Diseases

15. Skin conditions (Scabies, fungal infection and Eczema)
16. Otitis Media
17. Rheumatic heart disease
18. Reactive airway disease
19. Dental caries
20. Convulsive disorders

### Developmental delays and Disabilities

21. Vision Impairment
22. Hearing Impairment
23. Neuro-motor Impairment
24. Motor delay
25. Cognitive delay
26. Language delay
27. Behavior disorder (Autism)
28. Learning disorder
29. Attention deficit hyperactivity disorder

**30. Others: Congenital Hypothyroidism, Sickle cell anaemia, Beta thalassemia (Optional)**



Ministry of Health & Family Welfare  
Government of India