# Notice for Parents on BCG Vaccination

# BCG Vaccination Greatly Reduce the Incidence Rate of Tuberculous Meningitis

BCG (Bacillus Calmette-Guérin) is a vaccine against severe tuberculosis (TB) in young children. Research shows that the incidence rate of tuberculous meningitis in young children without BCG vaccinated is 152 cases per million population. In the absence of early intervention, tuberculous meningitis will cause irreversible cerebrospinal disorders (e.g., loss of self-care ability and intelligence impairment) and accompany with a case fatality rate up to 20-40%.

The incidence rate of tuberculous meningitis in young children without BCG vaccinated is 47 times higher than those vaccinated.

### Immunization Schedule

- ✓ Infants without contradictions of BCG should get vaccinated during 5-8 months after birth or no later than one year old.
- ✓ Suggesting that infants who live in areas at particularly high incidence rate or plan to leave for countries with high TB incidence rate should get vaccinated earlier.

### Possible Side Effects after Vaccination

- Common but minor side effects: Local abscess and lymphadenitis.
- Uncommon but rather serious side effects: Osteitis
  or osteomyelitis, and disseminated BCG infection.
   As for disseminated BCG infection, it occurs
  primarily among immunocompromised infants.

Reminder:

Osteitis or osteomyelitis usually occur few months to 1 year after vaccination.

Mostly, osteitis or osteomyelitis violates extremities, causing local swelling, tenderness, claudication, and so on.

Therefore, if these symptoms occur, please seek pediatrician for proper assessment and treatment.

Side effects Sources	Osteitis /osteomyelitis	Disseminated BCG Infection	Suppurative lymphadenitis
Taiwan surveillance data (infants born in 2016-2020)	29.8 cases per million of population	1.1 cases per million of population	185.4 cases per million of population
WHO 2018 Report	0.01-700 cases per million of population	2-34 cases per million of population	710-10,140 cases per million of population

In Taiwan, active surveillance of BCG vaccination-related side effects shows that the incidence rate of osteitis/osteomyelitis is about **29.8** cases per million of population, falling within WHO's estimation.



For more information about BCG vaccination, please visit the website of Taiwan Centers for Disease Control at https://www.cdc.gov.tw.

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#### **Cautions about Vaccination**

# Before vaccination

Verify if either of both parents have family history of primary immunodeficiency (e.g. death caused by infection due to unknown reasons). Moreover, parents with HIV should consult an infectious disease specialist before children to be vaccinated.

# During vaccination

Infants aged 5-8 months are very active. Parents should follow the instructions of health professionals to properly hold them, so as to ensure the whole process of vaccination can be completed smoothly.

## After vaccination

Parents should regularly trim the fingernails of their infants, cover the wound with gauze and tape or dress their infants with long-sleeves to prevent them from scratching the injection site, which may cause infection. Besides, changing gauzes is necessary when gauze gets wet or sticks to wound.

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### Normal Condition after Vaccination



3 weeks





A small red nodule appears on the injection site. It will grow gradually with minor pain and itchiness, but barely develop a fever.

Swelling happens within 3 weeks after vaccination. Approximately, 75% of infants' swollen size is less than 1 cm.

An abscess or ulcer may occur after 6 weeks for 40% of infants.

Scab will form and then leave a small pink scar.
After a period of time, the scar will turn into the skin color.

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#### Other Information

- It is normal that bruising will appear at the injection site after 5 weeks for 20% of infants.
- For some infants, pus might occur within 6 weeks after inoculation, and scab will form after 4 months on average. If parents are worried that their child's skin reaction is abnormal, please seek medical attention for proper assessment and treatment.
- Parents should inform physicians of BCG vaccination when infants have possible side effects such as local abscess or swelling; or contact local public health bureaus (health centers) to refer their children to a pediatrician (or ask for joint consultation with pediatricians) to clarify the condition.
- Children with possible or confirmed side effects from BCG vaccination may apply for "Vaccine Injury Compensation Program (VICP)" through local public health bureaus' assistance.

Please fill out the bottom portion of this \_\_\_\_\_\_\_ notice and return it back

#### Reply from Parents

Name of infant:	(or son/daughter of
Signature of parent:	
Signature of administrator:	

☐ I have read through the "Notice for Parents on BCG Vaccination" and have received the health education from health professionals administering the vaccination.