



Assessment of use of Antenatal Corticosteroids and National Operational Guidelines in Haryana State, India.

Preterm babies are defined as babies who are born before 37 weeks of gestation. The World Health Organization (WHO) has classified preterm birth into three categories based on completed gestation period: extremely preterm (less than 28 weeks), very preterm (28 to 32 weeks), and moderate to later preterm (32 to 37 weeks). Premature birth is a leading cause of death among children under the age of 5 years. It is estimated that nearly 14% of 26 million annual live births in India are born preterm. Of these 3.5 million babies born preterm, nearly 10% die due to complications of preterm birth. Many survivors live with learning disabilities and hearing and vision problems. The use of antenatal corticosteroids (ACS) can help reduce preterm deaths of newborns by more than 30%. The timely use of ACS is recommended for the management of preterm labour from 24 weeks to 34 weeks of gestation under specific conditions. WHO therefore strongly recommends ACS use when the following conditions can be met: accurate assessment of gestational age, preterm birth is considered imminent within 7 days, no clinical evidence of maternal infection, availability of adequate childbirth care and adequate preterm newborn care. The WHO recommendations are based on current available evidence to operationalize safe and effective ACS use at delivery points, with an emphasis on quality of care.

Purpose and Scope of Guidelines

The purpose of these operational guidelines is to ensure safe and effective ACS use to improve outcomes for preterm infants at all facilities in India, with an emphasis on quality of care. These guidelines are consistent with the WHO Recommendations on Interventions to Improve Preterm Birth Outcomes and are based on current available evidence.

The Government of India developed these guidelines to:

- . Authorize facilities to provide ACS according to their different levels and readiness.
- . Required facility readiness criteria for adequate preterm newborn care and childbirth care for both mother and newborn.
- . ACS – specific infrastructure, logistics, human resources, standard protocols, and service packages.
- . Skilled health care providers for accurate gestational age assessment and safe ACS administration.
- . Provide clarification on the role of health care providers (doctors, medical officers, staff nurses), facility-in-charges, and program implementers regarding ACS implementation.



- . Develop appropriate and functional referral services: timely in-utero referral of pregnant women in preterm labour (with or without pre-referral dose of ACS) to facilities with adequate preterm care for a full course of treatment.
- . Ensure appropriate record keeping practices: complete documentation of the vital statistics related to ACS (e.g. accurate assessment gestational age, indications of ACS administration, dose with time and date, viable pregnancy).
- . Develop key indicators for monitoring and supervision and effective implementation of ACS at public health facilities.
- . Propose appropriate indicators for ACS coverage and ACS quality.

Recommendations

The government of India recommends ACS for women at risk of preterm birth when all of a set of client, facility and provider conditions are met (Table 1).

Table 1: Conditions for Safe and Effective Use of ACS

	Recommendations
Client	<ul style="list-style-type: none"> . Adequate ascertainment of gestational age between 24 and 34 weeks, . Birth is imminent (anticipated within 7 days) . No evidence of maternal infection.
Facility	<ul style="list-style-type: none"> . Adequate obstetric (comprehensive emergency obstetric care) and newborn care packages (Newborn Stabilization Unit or Special Newborn Care Unit services) are available, . Adequate preterm newborn care must include resuscitation, thermal care, feeding support, infection treatment, and safe oxygen use, . Functional referral/adequate referral linkage: Ambulance well equipped to provide basic and advanced life-support to mother and baby, . Robust documentation of parameters related to ACS, and . Regular supervision for safe and effective use of ACS.
Provider	<p>Staff trained in:</p> <ul style="list-style-type: none"> . Accurate assessment of gestational age, . Identification of threatened preterm birth, . Indications and contraindications of ACS, and . Essential documentation of ACS use in the case record.

These operational guidelines for health care providers at all delivery points in all facilities will help to ensure the safe and effective use of ACS for threatened preterm birth.