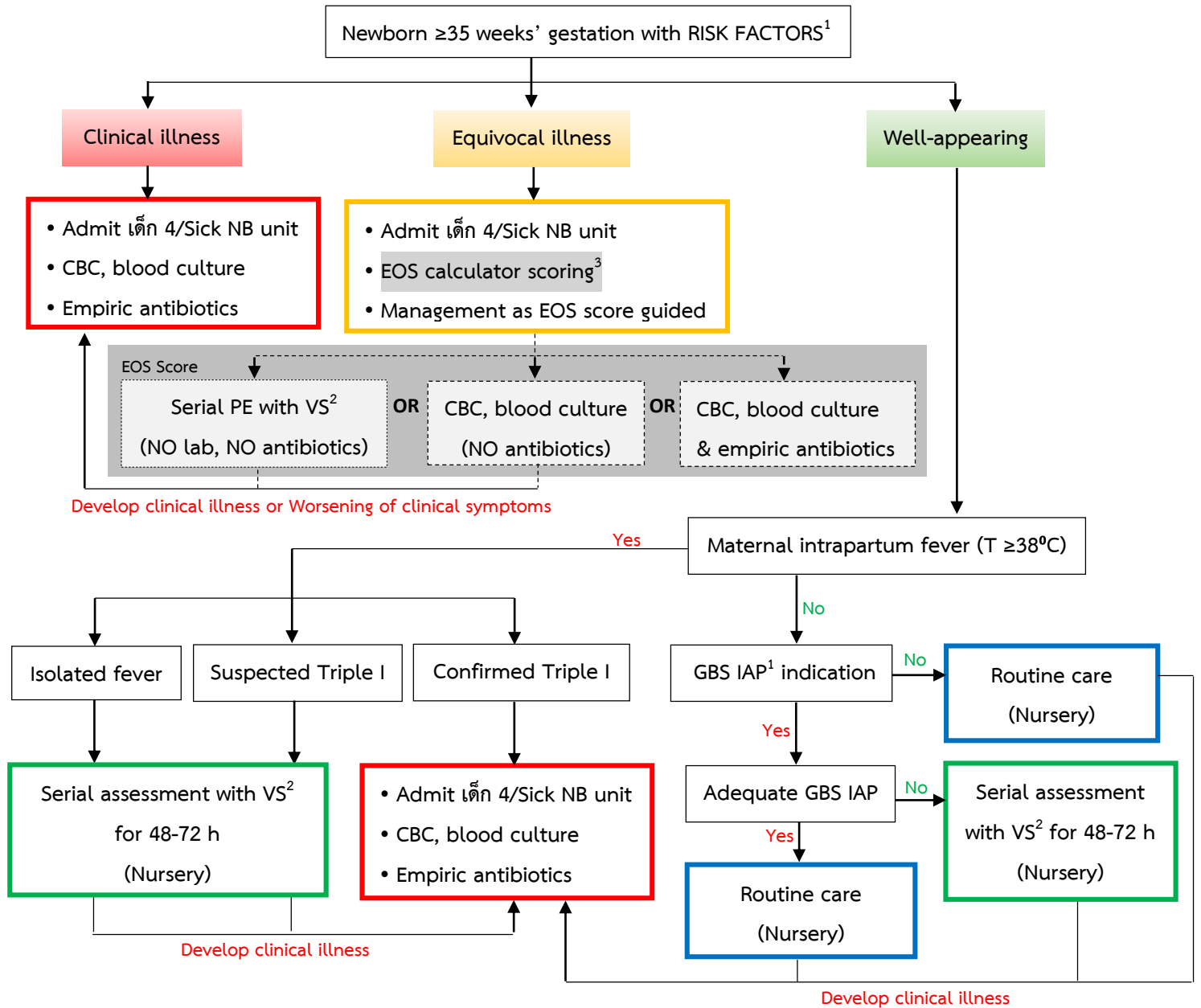


NEONATAL EARLY ONSET SEPSIS (EOS) GUIDELINE



RISK FACTORS¹/indication for GBS intrapartum antibiotic prophylaxis (IAP)¹

- Maternal intrapartum fever and/or intrauterine inflammation or infection (Triple I)
- GBS bacteriuria during any trimester of the current pregnancy
- Previous infant with invasive GBS disease
- Maternal positive for GBS culture during current pregnancy
- Late preterm $\geq 35^{0/7}$ to $36^{6/7}$ weeks gestation with true labor pain and/or ROM regardless of rupture duration
- Term (≥ 37 weeks) with ROM ≥ 18 hours

Serial assessment with VS²

Assessment by nurse: 1 time per shift

VS: vital signs monitoring every 4 h for 24 h then every 4-8 h until discharge

Clinical illness (at anytime during the admission)

- Supplemental O₂ requirement ≥ 2 h and/or need for CPAP (outside the delivery room), HFNC, mechanical ventilator
- Hemodynamic instability requiring fluid bolus or vasoactive drugs
- Perinatal depression, lethargy, irritability, apnea, seizure
- Poor feeding

Equivocal illness

- One abnormal parameter for ≥ 4 h after birth
- ≥ 2 abnormal parameters ≥ 2 h after birth
- Not requiring supplemental O₂

Parameter

1. T $> 38^{\circ}\text{C}$ or $< 36.5^{\circ}\text{C}$
2. HR $> 160/\text{min}$
3. RR $> 60/\text{min}$
4. Respiratory distress

Maternal intrapartum fever OR Triple I Classification

Isolated maternal fever

- 1) Maternal oral temperature $\geq 39.0^{\circ}\text{C}$ on any one occasion is documented fever.
- 2) If the oral temperature is $38.0 - 39.0^{\circ}\text{C}$, repeat the measurement in 30 min; if the repeat value remains $\geq 38.0^{\circ}\text{C}$, it is documented fever.

Suspected Triple I

Fever without a clear source plus any of the following:

- 1) Baseline fetal tachycardia (FHR $>160/\text{min}$ for ≥ 10 min, excluding accelerations, decelerations, periods of marked variability)
- 2) Maternal WBC $>15,000/\text{cu mm}$ in the absence of corticosteroids
- 3) Definite purulent fluid from the cervical os

Confirmed Triple I

Suspected triple I plus:

- 1) Amniocentesis-proven infection through a positive Gram stain
- 2) Low glucose or positive amniotic fluid culture
- 3) Placental pathology revealing diagnostic features of infection

Neonatal Early Onset Sepsis (EOS) Calculator Scoring³

เข้า website <https://neonatalesepsiscalculator.kaiserpermanente.org/> เพื่อคำนวณ risk score และ management

Predictor	Scenario
Incidence of Early-Onset Sepsis ?	<input type="text"/>
Gestational age ?	<input type="text"/> weeks <input type="text"/> days
Highest maternal antepartum temperature ?	<input type="text"/> Celsius <input type="text"/>
ROM (Hours) ?	<input type="text"/>
Maternal GBS status ?	<input type="radio"/> Negative <input type="radio"/> Positive <input type="radio"/> Unknown
Type of intrapartum antibiotics ?	<input type="radio"/> Broad spectrum antibiotics > 4 hrs prior to birth <input type="radio"/> Broad spectrum antibiotics 2-3.9 hrs prior to birth <input type="radio"/> GBS specific antibiotics > 2 hrs prior to birth <input type="radio"/> No antibiotics or any antibiotics < 2 hrs prior to birth

Calculate »

Clear

Risk per 1000/births			
EOS Risk @ Birth		0.74	
EOS Risk after Clinical Exam	Risk per 1000/births	Clinical Recommendation	Vitals
Well Appearing	0.30	No culture, no antibiotics	Routine Vitals
Equivocal	3.67	Empiric antibiotics	Vitals per NICU
Clinical Illness	15.38	Empiric antibiotics	Vitals per NICU

Classification of Infant's Clinical Presentation [Clinical Illness](#) [Equivocal](#) [Well Appearing](#)

ตัวอย่าง หลังจากคำนวณโดยใช้ EOS calculator สำหรับ equivocal illness (ในตารางนี้แนะนำให้ตรวจ lab และให้ antibiotics)