

Student Name: Paige

## NICU Disease Process

D.O.B.	1/24/26	APGAR at birth: 9
Gestational Age: 34 weeks 4 days		Adjusted Gestational Age: 35 weeks 1 day
Birthweight: 4 lbs 11.1oz./2130grams		

Disease Name: Respiratory distress syndrome

What is happening in the body?

The babies' lungs lack surfactant needed to keep alveoli open, so they collapse impairing gas exchange. The lungs are stiff and harder to expand when alveoli are collapsed so the babies work of breathing is even harder.



What am I going to see during my assessment?

Nasal flaring, grunting, low oxygen saturation, and tachypnea. The specific tachypnea is called transient tachypnea of the newborn (TTN), but often resolves within the first 48 hours after birth.



What tests and labs would I expect to see? What are those results?

Tests would include arterial blood gas to measure CO<sub>2</sub> in the babies blood that could potentially lead to acidosis. A chest X-ray is also ordered and it would find that there are glass like markings in the lungs with low lung volume.

What medications and nursing interventions or treatments will you anticipate?

A medication that would likely be given is a surfactant replacement and steroids to help develop and improve lung structure. The baby may require oxygen, and in severe cases a CPAP to keep the alveoli open. The baby might also need minimal handling to reduce oxygen demand in the body and promote thermoregulation.

Please write up any medications given or any medications that your patient

How will you know that your patient is improving?

The patient will be improving when the signs of increased work of breathing are minimal or absent (grunting, nasal flaring) and improved oxygen saturation.

What are the primary risk factors for this diagnosis?

The primary risk factor is prematurity due to the lungs being underdeveloped. It's also more common in twins, especially twins who share a placenta. C-section babies are also at higher risk.

What are the long-term complications?

Bronchopulmonary dysplasia is a big risk because it's a chronic disorder from having long term oxygen or ventilation. They can also develop restrictive airway diseases like asthma or asthma-like symptoms. Babies can also be at risk of cognitive impairment due to hypoxia.