

## **INTRODUCTION**

Respiratory distress syndrome “Hyaline membrane disease” it is one of the most common cause of death in neonate it occurs primarily in premature infants, its incidence is inversely proportional to gestational age and birth weight.

It occurs in 60-80% of infants less than 28 weeks gestational age, in 15-30% of those between 32 and 36 weeks, in about 5% beyond 37 weeks, and rarely at full term babies.

A variety of hormones, including glucocorticoids and thyroid hormones, are considered to influence pulmonary development and lung surfactant production.

Glucocorticoids can interact synergistically with other factors such as thyroid hormones and prolactin to promote early lung maturation in fetal lambs.

It has been reported that the thyroid stimulating hormone (TSH surge, which is an increase in the level of TSH after birth) is stimulated by stress at birth ,which in turn enhances increased production of lung surfactant .There are many reports documenting the TSH surge in term infants.