COLORADO VULNERABLE INFANTS - Premature, Medically fragile, and At-risk Infants: Did You Know?

- Every year in Colorado approximately 7,000-8,000 premature infants (born before 37 weeks gestation), medically fragile and at-risk infants are born. This is over 10.4% of all Colorado births.
  - Health disparities are known to impact the percentage of premature births. In Colorado, the percentage is highest for Black infants (13.9%), followed by Native American (13.7%), Asian (10.3%), Hispanic (10.8%) and Caucasian (9.8%).
  - Less than 1,000 of these infants are eligible for and are connected with Early Intervention Colorado each year.
  - The United States Healthy People 2020 goal is to reduce preterm births to less than 9.6% of live births.

- Premature infants may be born to any mother; however, they are more likely to be born to mothers who experience health disparities and financial difficulties.
  - Health disparities result in late or no prenatal care and unintended pregnancies. Thirty percent of women who have an unintended pregnancy will have a second unintended pregnancy. Seventy percent of women with a second unintended pregnancy will have a third unintended pregnancy. Each pregnancy is at greater risk for a preterm birth.
  - Health disparities result in untreated health concerns such as infections, diabetes, obesity and hypertension. Life style choices such as smoking, alcohol, and drug abuse increase the likelihood of preterm births. These health conditions are not immediately resolved after delivery resulting in higher support needs for both mothers and babies.
  - Families of premature infants may also experience financial consequences due to the baby’s medical condition when one parent has to quit their job to stay home and care for their baby.

- Premature infants have more regulatory problems, due to their medical fragility and neuro-developmental immaturity, resulting in increased infant morbidity and mortality.
  - Premature infants are at greater risk for infant death (15% of Colorado infant deaths) due in part to health concerns, child abuse and neglect, as well as SUID, (Sudden Unexpected Infant Death) SIDS (sudden infant death syndrome), ASSB (accidental strangulation or suffocation in bed) and undetermined causes, which account for 10% of all the infant deaths.
  - Health disparities also impact infant deaths with Black infant deaths (13/1,000) exceeding white Hispanic (7.8/1,000), American Indian/Native Alaskan (6.3/1,000), White, non-Hispanic (4.5/1,000) and Asian American/Pacific Islander (3.6/1,000) infant deaths.
  - Neuro-developmental immaturity, even in healthy appearing late preterm infants, results in increased irritability, crying, and disorganized sleep patterns, causing greater challenges for parents. Mothers of premature infants experience more stress, resulting in mental health issues such as depression and anxiety.
  - Early regulatory problems are associated with difficulties in the parent-child relationship. Regulatory disorders can affect preschool and school readiness without parent support and anticipatory guidance.

- Preterm and late preterm infants (32 – 37 weeks gestation) are more likely to be re-admitted to the hospital after discharge, and require additional community support and services, resulting in a significant economic impact.
  - Premature infants have an increased need for health services due to complex medical conditions that include respiratory, neurologic, cardiac, gastrointestinal, vision and hearing problems.
  - Late premature infants, who account for about 75% of all preterm births, have a greater rate of re-hospitalization and health care utilization, resulting in an increase in total health care costs compared to term infants.
  - The cost of preterm and low birth weight births averages $58,000.00, compared with the average term infant cost of $4,300.
  - The re-hospitalization costs for preterm infants can be as high as $43,628.00 for respiratory failure. Additional health care costs can continue through the first year of life.
  - Due to developmental issues, premature infants also have an increased need for early intervention services. Early intervention costs an estimated $611 million for this population, with additional costs for special education services at school age.
  - The Institute of Medicine estimates that the total cost to the United States for infants born prematurely is 26 billion dollars a year.
References

Articles:


The Academy of Breastfeeding Medicine. ABM Clinical protocol #10 Breastfeeding the late preterm infant (34 0/7 to 36 6/7 weeks gestation (First Revision June 2011). *Breastfeeding Medicine.* 2011; 6(3): 151-156.


Web Sites:


Colorado Infant Mortality Report