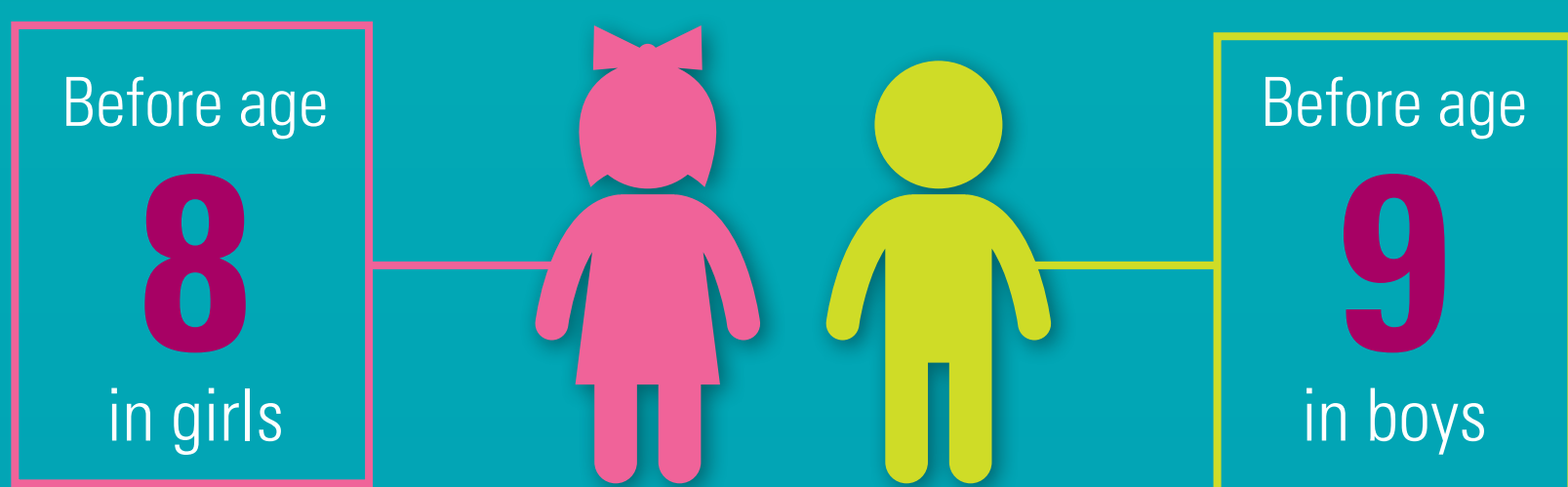


WHAT IS CPP? FACTS TO KNOW

Central precocious puberty (CPP) is when a child shows signs of puberty sooner than normal.^{1,2}



CPP can be diagnosed in children as young as **2 years old**.³

CPP affects  **1 in 5,000-10,000**  children⁴

CPP is more common **in girls** than **boys**

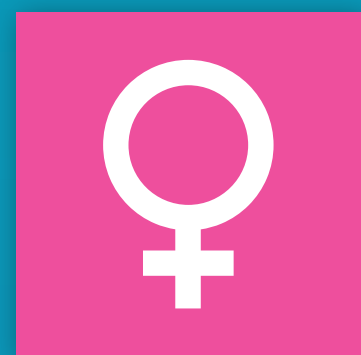


Although the exact cause is unknown, CPP results from early release of gonadotropin-releasing hormone (GnRH) by a part of the brain called the hypothalamus.⁵

- > The early release of GnRH leads to the production of estrogen and testosterone by the ovaries or testicles
- > Estrogen and testosterone cause the physical changes of puberty

Common signs of puberty in **girls** and **boys** are:

Girls⁶⁻¹⁰



- Breast development
- Menstrual period
- Pubic or underarm hair
- Oily skin/acne
- Adult body odor
- Sudden growth spurt

Boys⁹⁻¹²



- Testicle & penis enlargement
- Erections
- Voice change
- Facial hair
- Muscle growth
- Pubic or underarm hair
- Oily skin/acne
- Adult body odor
- Sudden growth spurt

Without treatment, as adults, children with CPP will be shorter in height due to the premature fusion of growth plates.¹³



CPP has also been associated with low self-esteem and higher anxiety, irritability or withdrawal.^{5,14,15}



GnRH inhibitors are the primary CPP treatment and can help preserve time in childhood.¹⁶