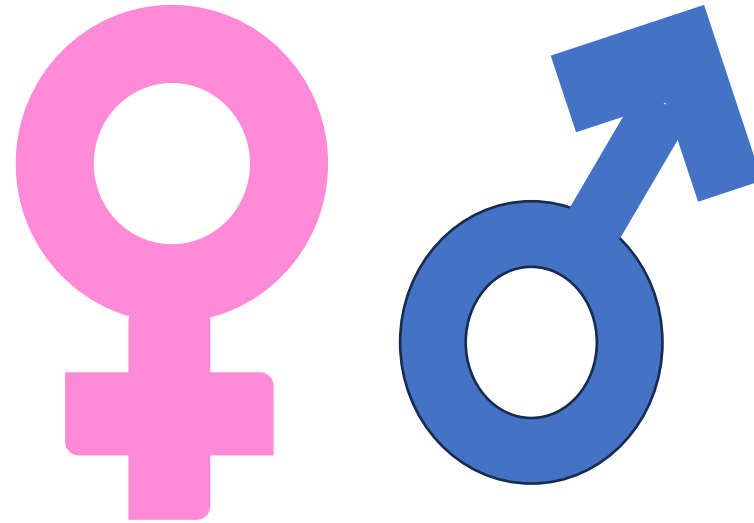


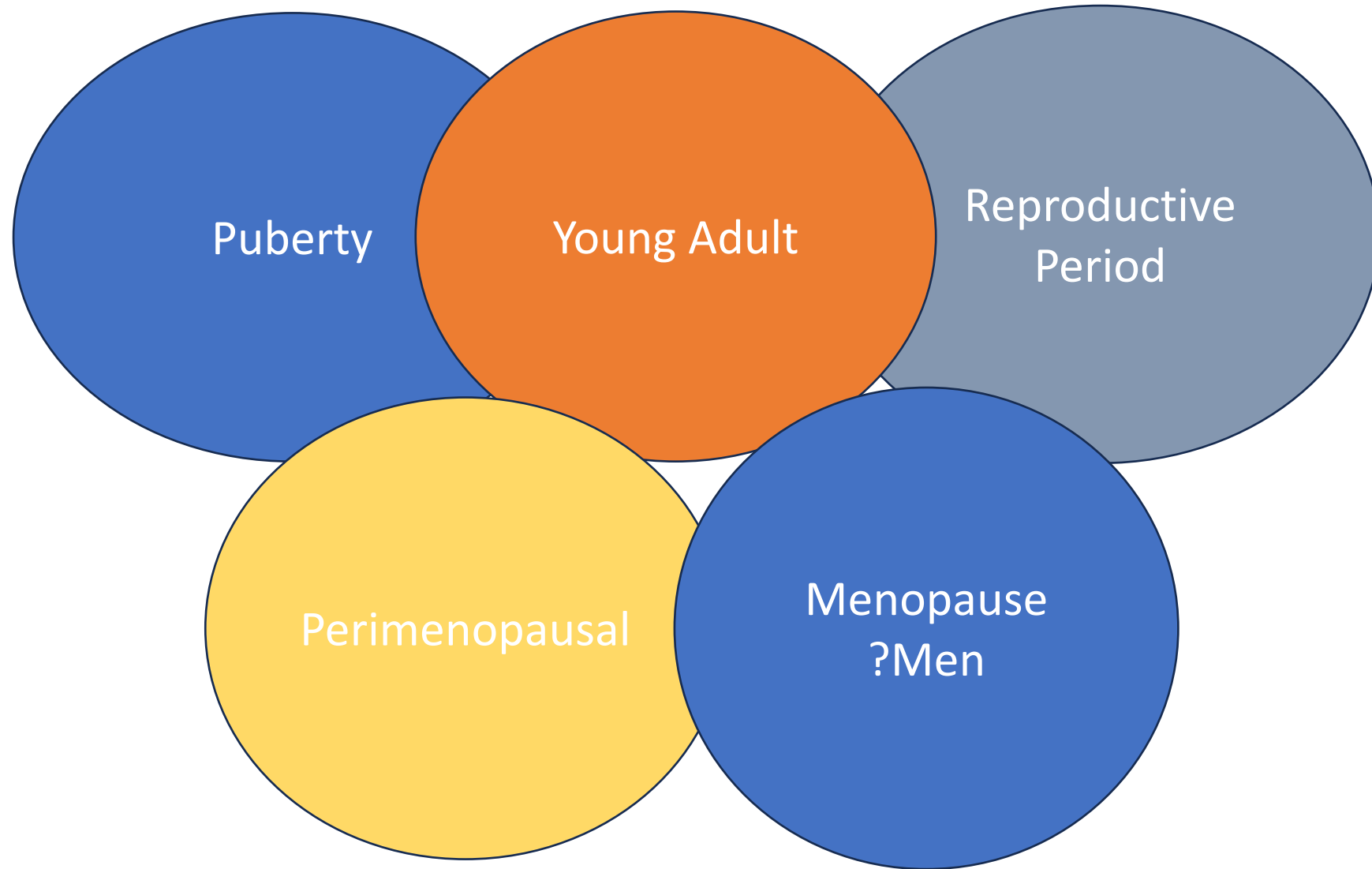
Little People of America

October 17, 2024

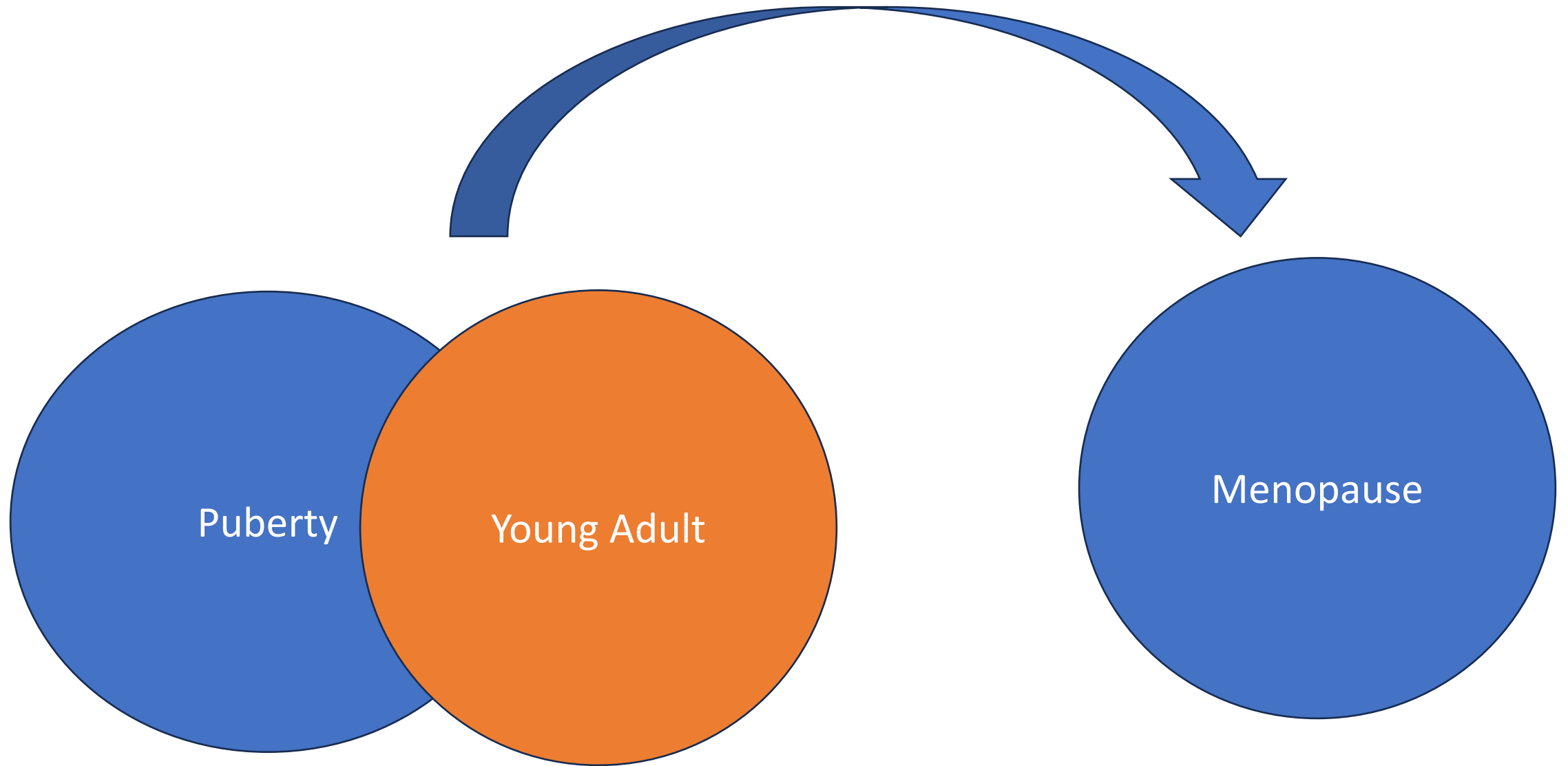
Women's and Men's Health Awareness in 2024



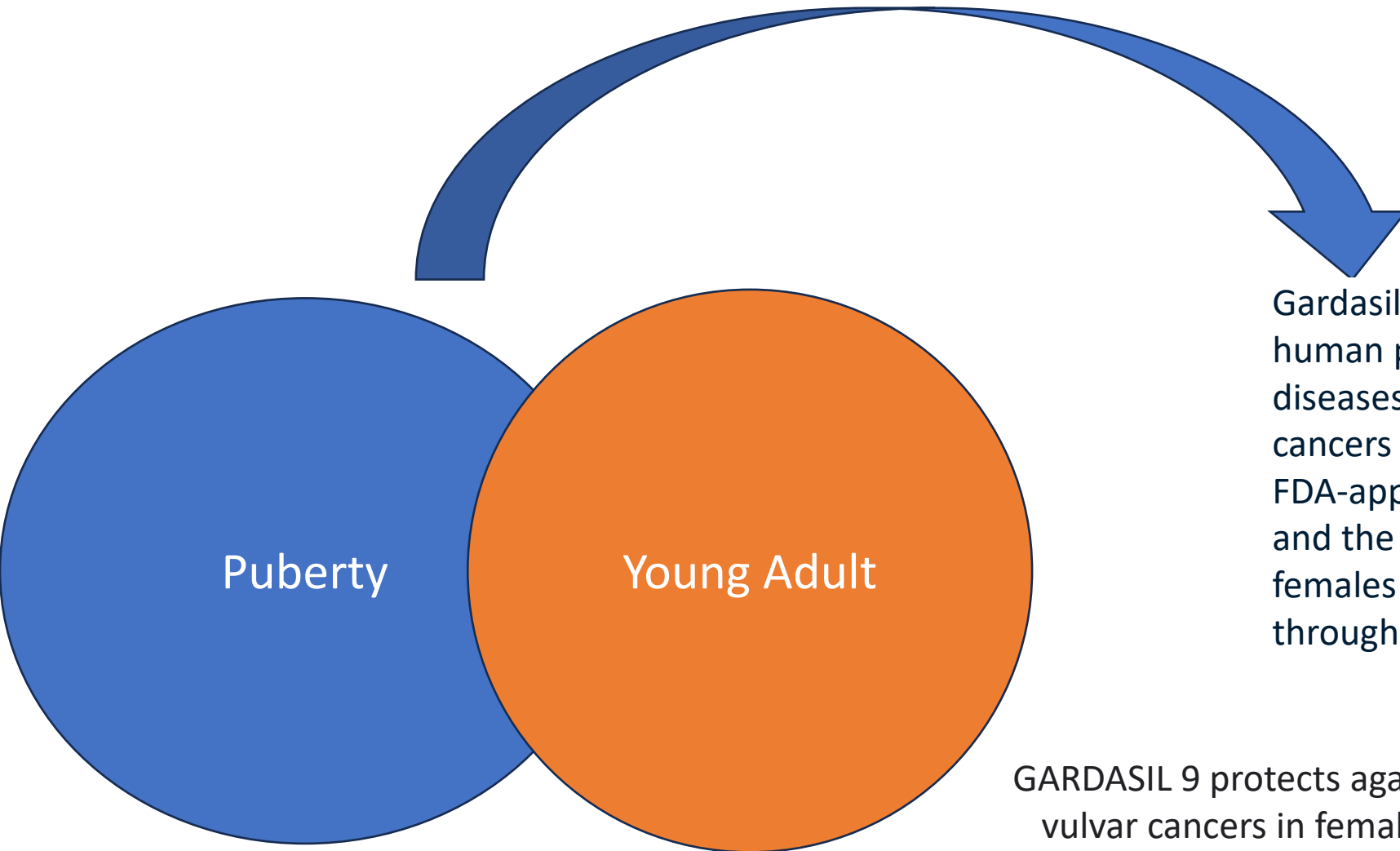
Health in 2024



Health over a lifetime –health span



Health over a lifetime –health span



Gardasil 9 is a vaccine that protects against human papillomavirus (HPV) and the diseases it causes, including certain cancers and genital warts. The vaccine is FDA-approved for use in people ages 9–45, and the CDC recommends it for most females through age 26 and most males through age 21

GARDASIL 9 protects against individuals for cervical, vaginal, and vulvar cancers in females, anal cancer, certain head and neck cancers, such as throat and back of mouth cancers and genital warts in both males and females.

HPV-associated cancers have increased to nearly 43,000 people annually in the US.

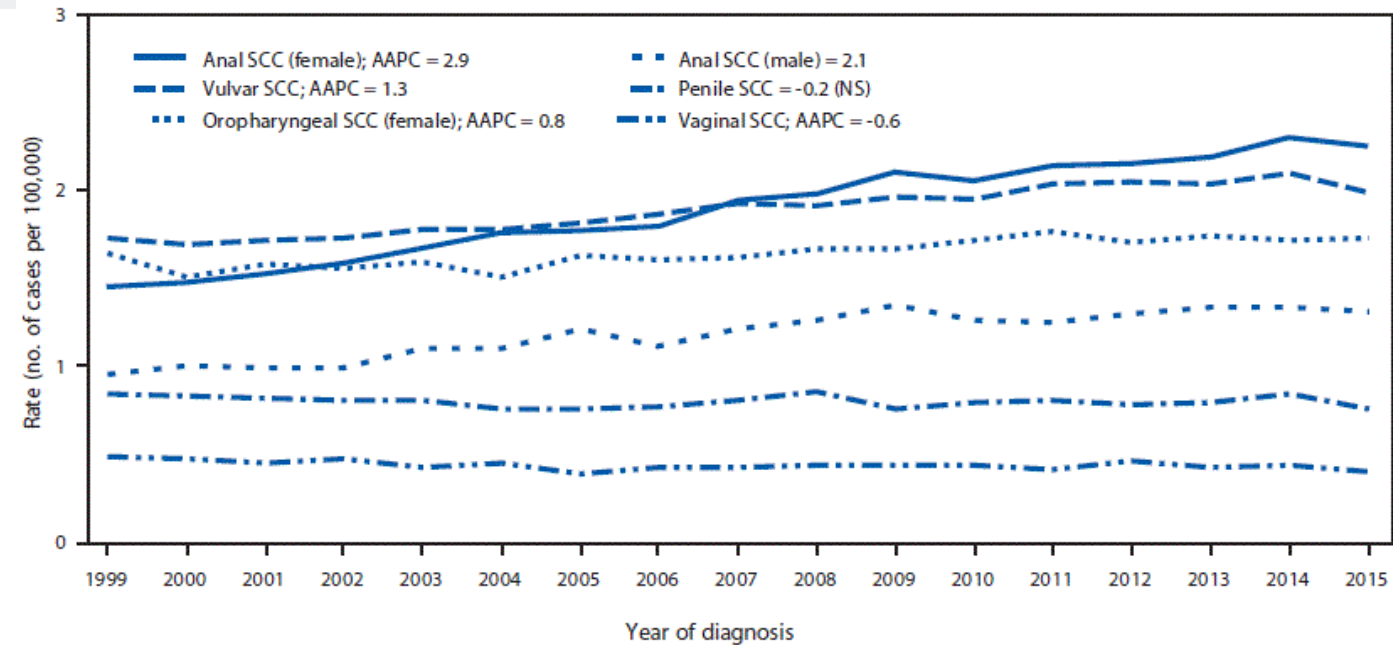
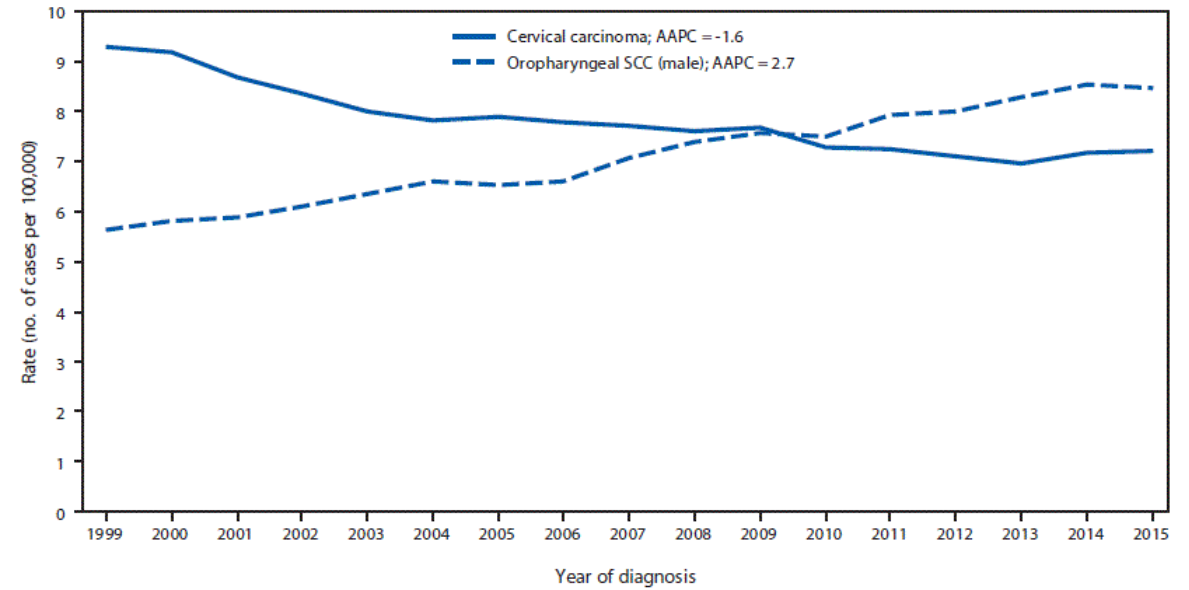
Most can be prevented by the HPV vaccine.

295849-P



Head and neck cancer is increasing in incidence and globally, is it largely driven by oropharyngeal cancer. Mortality rates over the last decade have also started to rise. Major risk factors:

- Tobacco smoking alone and in combination with alcohol consumption
- Betel chewing (particularly in Southeast Asian populations)
- Papillomavirus in oropharyngeal cancer



Women's Health Issues

- Women have some unique health issues (pregnancy, menopause, female genital tract)
- Some health issues that affect both men and women can affect women differently
 - Women are more likely to die following a heart attack than men
 - Women are more likely to show signs of depression and anxiety than men
 - The effects of sexually transmitted diseases can be more serious in women
 - Osteoarthritis affects more women than men
 - Women are more likely to have urinary tract problems

Women's Health Issues

- Alcohol usage
- Men are more likely than women to become dependent on alcohol, but the health effects are more serious in women. This includes the risk for breast cancer and heart disease.
- Human and animal studies demonstrate that chronic, heavy alcohol consumption compromises bone health, increases the risk of osteoporosis and decreases bone density. The effect of moderate alcohol use on bones is less clear.

Women's Health Issues

- Puberty
 - Age of onset is closely aligned with the age of onset of menses in the mother
- Reproductive issues (birth control) - Personal choice
 - Birth control pills are not contraindicated in patients with osteogenesis imperfecta unless there are “other” medical contraindications
 - Similarly, there is no contraindication to intrauterine devices/implant devices though insertions can be difficult with some spinal abnormalities

Women's Health Issues and Medications

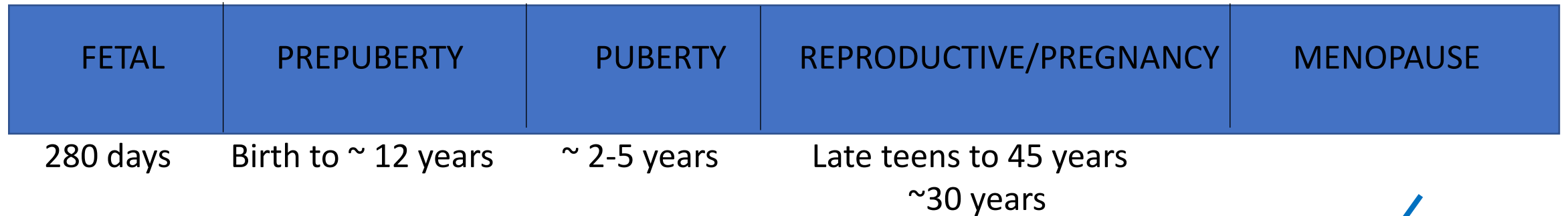
- Drugs that are used to treat some medical conditions that affect women that have a negative impact on bone density
- Long term oral glucocorticoid use (autoinflammation, for example lupus)
- Aromatase inhibitors used for the treatment of breast cancer; anastrozole, letrozole, exemestane have been associated with increased bone loss and increased fractures of the wrist and spine. WEIGHED AGAINST THE NEED FOR TREATMENT
- Depo–Provera; *long term* use of injectable Depo-Provera has been associated with significant reduction in bone mineral density (about 5% in the general population with recovery)
- Excessive thyroid hormone replacement – hypothyroidism is more common in women

Women's Health and Menopause



A Conversation about Women, Menopause, and Longevity

Women's Lifespan and Health Span



- 1.3 million US women enter menopause every year
- 70% of women in menopause are symptomatic
- Symptoms vary, but can last on average 7-10 years

Remainder of a woman's life!

Women's Aging and Wisdom



- Elephant groups rely on elder stateswomen and matriarchs are at the hub of a complex social network
- They carry a trove of crucial information and critical to the well-being and success of the family – they are the bedrock
- In the wild they can live until ~ 70 years of age
- Matriarchs balance the needs of the group, they avoid unnecessary trails, are more adept at recognizing predator dangers, remember when and where resources are available, and tend to keep a cool head
- They have very large brains likely contributing to their excellent memory

Symptoms of Menopause

Menopause is the permanent cessation of menses because of lack of ovarian function

Perimenopause is the stage of menopause transition characterized irregular menstrual cycles

early perimenopause – menstrual irregularity (amenorrhea, for 3 months apart or less than a one year period

late menopause - no menses for > three months but less than a one year window

postmenopause -no menses for one year

Symptoms of Menopause

- Menopausal symptoms have a substantial effect on the quality-of-life women and on performance in the workplace
 - According to a Mayo Clinic study, menopause costs an estimated 1.8 billion in lost working time per year for women in the U.S.
- Metabolic issues – increases risk for glucose issues/diabetes
- Cardiovascular – changes in cholesterol profiles
- Musculoskeletal changes – variable effects on muscle mass, tendonopathy
- Urogenital and skin changes – urinary incontinence, drier skin
- Sexual dysfunction
- Cognitive issues – forgetfulness, irritability, mood swings
- Osteoporosis

Bone loss and Menopause

- Variable estimates in the literature on bone loss and menopause
- Overall, during the period of perimenopause and menopause estimates suggest that a woman without any other contributing risk factors can lose up to 20% of their bone mass
- 50% of postmenopausal have osteoporosis
- Variable estimates on bone loss during the perimenopausal period but data suggest that there is little bone loss during the perimenopause period, but during the late perimenopausal period there is a 1.8- 2.3% annual rate of bone loss in the lumbar spine and 1.0–1.4% in the hip

Hormonal Treatment

- Women younger than 60 years of age or within 10 years after the onset of menopause who have symptomatic menopausal hot flashes or night sweats are most likely to benefit from hormone therapy
- For women with early menopause without contraindications, hormone therapy is recommended until at least the average age of natural menopause
- Observational studies suggest that the risk of thromboembolism and stroke is lower with transdermal therapy than with oral hormone therapy
- Compounded bioidentical hormone therapies that have not been approved by the FDA (not recommended)
- Hormones are not recommended for primary or secondary prevention of coronary heart disease or dementia
- Nonhormone therapies that have been shown to reduce hot flashes include low-dose selective serotonin-reuptake inhibitors and serotonin–norepinephrine reuptake inhibitors, gabapentinoids, weight loss, hypnosis, and cognitive behavioral therapy
- For women with only genitourinary symptoms, local vaginal hormone therapies are recommended
- Fezolinetant or Veozah (2023) a neurokinin 3 (NK3) receptor antagonist that works to reduce the frequency and intensity of hot flashes by restoring the balance between estrogen and NKB by blocking NKB in the temperature control center of the brain
- In the Women’s Health Initiative (WHI) hormone combination (estrogen and progesterone therapy or estrogen alone) decreased the risk of hip fracture by approximately 33%

Men's Health

- Long standing patterns indicate that many males are challenged to effectively manage their health and/or illness
- While the adult male population between the ages of 18 to 65 is about 35% of the population, the health of men is generally worse than that of women
- Women attend doctor visits for annual or preventive services at a rate 100% higher than men
- There is a social construct that tries to explain connections between masculinities and men's health behaviors
- Concept of men's avoidance of health promotion and professional health care services may be resultant from masculine ideals of self-reliance, stoicism and competitiveness
- Need to improve men's health literacy
- Admittedly, the concept of men's health is a relatively new and evolving specialty

Men's Health and Problematic Behavior

- Non-help seeking
- Tobacco use
- Poor eating habits
- Alcohol use
- Physical inactivity
- Steroid use (for achievement, status and winning)

Men's Health and Testosterone

- Testosterone is an anabolic steroid which regulates carbohydrates, lipids and protein metabolism, and energy metabolism
- Testosterone levels generally peak during adolescence and early adulthood. As you age, your testosterone level gradually declines — typically about 1% a year after age 30 or 40.
- it's important to determine if a low testosterone level is due to normal aging or resultant from disease
- Testosterone deficiency can cause reduce lean body mass, reduced bone mineral density, increased adiposity (fat), reduced energy, and sexual function
- It is also associated with adverse changes in the lipid profile (cholesterol) and increased pro-inflammatory factors
- Increased pro-inflammatory factors contribute to increased risk of atherosclerosis, coronary artery disease and adverse cardiovascular events
- It has been shown that normalization of testosterone deficiency is associated with reduced of myocardial infarction (heart attacks) and mortality (controversial)

Men's Health and Testosterone

- However, controversies continue
- It is not an anti-aging treatment
- Randomized control trials have tried to elucidate the benefits and risks of testosterone treatment
- These studies identified short-term beneficial effects on **bone mineral density (BMD)**, sexual function, body fat and muscle mass, and anemia; potential adverse effects on venous thrombosis and coronary artery plaque; and no effects on cognitive function, fatigue, or hemoglobin A1c (HbA1c)
- With treatment some men may experience side effects, such as breathing disturbances during sleep, breast swelling or tenderness, ankle swelling and acne