

# SIDE EFFECTS OF PUBERTY BLOCKERS

---

*What are*

## PUBERTY BLOCKERS?

The pharmaceuticals now sold as "puberty blockers" are better known as GnRH agonists, a class of drugs developed for use in men with advanced prostate cancer. GnRH agonists are also FDA-approved for endometriosis, uterine fibroids, and central precocious puberty (CPP). They are prescribed off-label to chemically castrate sex offenders, and they were briefly used as a treatment for autism (now debunked) in the 2000s and early 2010s. They are NOT approved as a treatment for gender dysphoria or any other mental illness.

For more information on the effects of GnRH agonists, follow the QR code below.



- loss of bone mineral density
- lowered peak BMD
- increased risk of osteoporosis and fractures
- periodontal disease
- increased risk of heart attack and heart disease
- increased risk of stroke
- increased risk of type 2 diabetes
- lowered resting heart rate
- weight gain
- increased percentage body fat
- insulin resistance
- higher glycemic markers
- arterial stiffness
- vasculitis
- atherosclerosis
- angina
- impaired thyroid function
- changes in TSH, FT3, and FT3/FT4 ratios
- hyperthyroidism
- hypothyroidism
- thyroiditis
- thyroid autoimmunity
- lowered intelligence and IQ
- memory loss
- impaired working memory and attention
- impaired executive function
- impaired visual spatial ability
- increased risk of dementia
- intracranial hypertension
- pseudotumor cerebri
- pituitary tumors
- depression
- anxiety
- insomnia and other sleep disorders
- increased emotional reactivity
- increased risk of suicide
- psychosis
- mania
- chemical castration
- lack of sexual development
- regression of sexual development
- penile shortening
- infertility
- vaginal dryness
- vaginal bleeding
- polycystic ovary syndrome (PCOS)
- frequent urination
- bloody urine
- constipation
- nausea and vomiting
- abdominal pain
- chronic intestinal pseudo-obstruction
- poor gut motility
- hot flashes
- headaches and migraines
- injection site pain
- injection site granulomas
- fibromyalgia and other chronic pain disorders
- cataracts
- increase in natural killer cells
- increased risk of autoimmune disease

## SIDE EFFECTS: TESTOSTERONE

---

- increased risk of heart attack, heart disease, and stroke
- irregular heartbeat
- type 2 diabetes
- high blood pressure
- metabolic syndrome (MetS)
- rapid weight gain
- shortness of breath
- sleep apnea
- depression and anxiety
- mood swings
- hostility
- insomnia
- worsening of existing mental illness
- addiction to and abuse of artificial testosterone
- intracranial hypertension
- seizures
- liver toxicity
- dyslipidemia
- polycythemia
- vaginal atrophy, which can lead to the need for a hysterectomy
- extreme vaginal bleeding
- vaginal, pelvic, and abdominal pain
- persistent menses
- vaginitis
- cervicitis
- pain during intercourse or orgasm
- painfully enlarged clitoris
- increased risk of uterine fibroids
- urinary urgency
- increased risk of UTIs and yeast infections
- joint pain
- acne

## SIDE EFFECTS: ESTROGEN

---

- stroke
- heart disease
- increased risk of heart attack, heart disease, and stroke
- blood clots, including deep vein thrombosis, venous thromboembolism, and pulmonary embolism
- increased risk of cancer
- type 2 diabetes
- high blood pressure
- weight gain
- depression
- anxiety and nervousness
- increased risk of suicide
- fainting and lightheadedness
- pituitary tumors
- breast and prostate tumors
- high triglycerides
- high potassium
- gallstones
- sexual dysfunction
- infertility
- nipple discharge
- abdominal cramps and muscle cramps
- bloating
- dry mouth and excessive thirst
- nausea and vomiting
- urinary urgency
- incontinence



*Be kind.*

Don't administer or prescribe artificial hormones to minors.