

## Minor Side Effects

The minor side effects listed below and which are experienced by women on oral contraceptives are the most common. They are not life threatening as are the major side effects, but may impact your sense of well-being.

### Minor Side Effects

- Weight gain
- Decreased libido
- Depression
- Hypertension
- Headaches
- Gall bladder disease
- Breast tenderness
- Nausea
- Mood changes
- Inter-menstrual spotting
- Vaginal discharge
- Visual changes with contact lenses

## In Conclusion

There are many ways a woman can control her fertility without interfering with her delicately balanced endocrine system and which have less impact on her health. A woman's menstrual cycle is regulated by the brain's pituitary gland and hypothalamus. Their hormones secreted in the brain act upon the ovaries in a delicately controlled monthly cycle. Hormonal contraception interferes with this delicate balance that is achieved only when a woman is in good health.

According to the CDC, 88% of US women between 15 and 45 years old, or 61 million women, have used hormonal contraception.(15) When confronted with statistical risks, many women may believe that with low risks, "it won't happen to me." Even though the risk of serious side effects is

low, when they are taken by millions of women, it results in tens of thousands of women whose health has suffered a major medical event damaging their health. This is reflected in the noticeable increase in very young women with breast cancer. For example, over the last 30 years there has been a 400% increase in non-invasive breast cancers in women under 50.

Major side effects may be life threatening or fatal. Safer options are available. A woman's fertility may last over 40 years during which time she is exposed to major and minor medical risks of hormonal contraception. As a woman is only fertile about 100 hours a month, or about 4 days, daily exposure to synthetic unnatural hormones may be seen as unnecessary and excessive.

### Is it ever worth taking a Group 1 carcinogen to control fertility?

Certainly, mild acne and menstrual cramps can be treated with less dangerous medications. There are other methods which control fertility without putting a woman's health and life at risk. For instance, natural family planning (NFP) methods have no negative impact on a woman's health.(16) Millions of women will get pregnant each year despite properly taking their hormonal contraception. NFP methods have been shown through research studies to be as effective as the Pill.(17)



**Now that you have the facts,  
you can make an informed choice.**

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# What smart women know



## before choosing The Pill



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# Introduction

Smart women who take the pill or any hormonal contraception want to be able to weigh the risks and benefits so they can decide what is best for them.

The first thing a woman should know is the efficacy of hormonal contraception. According to the Center for Disease Control, 9 out of 100 women each year who take the Pill faithfully as directed will get pregnant.(1) There is a 6-9% chance of pregnancy over a year with all hormonal contraceptives whether delivered in patches, pills, injections, IUDs or vaginal rings. This is also reflected in abortion statistics. According to the Guttmacher Institute, 17% of women who have abortions were taking hormonal contraception the month they became pregnant.(2)

The second thing a woman should know is how it will affect her health. We all know that all medications will have unwanted side effects and impact our health. Women should know the effects which are serious and even life-threatening as well as more minor effects that may make the Pill “worth the risk.” There are multiple major effects that cause the pill to be potentially lethal.

## Major Side Effects

- 1. The Pill can cause your blood to clot**  
These clots can form in your heart, brain, and travel to your lungs from the legs.
- 2. The Pill can make it easier to get potentially lethal infections**  
The Pill increases your risk of human papilloma virus (HPV) and human immunodeficiency virus (HIV).
- 3. The Pill can cause cancer**  
The Pill is a known group 1 carcinogen for breast, cervical and liver cancers according to the UN’s International Agency on Research of Cancer (IARC).
- 4. Long-term hormonal contraception was associated with an increase in glioma, a brain cancer.(3)**
- 5. The development of Multiple Sclerosis has been linked to hormonal contraception.(4)**

### 1 The Pill can make your blood clot

- Blood clots can form in the heart, the brain, or travel to the lungs from the legs.
- Blood clots in a heart artery cause a heart attack (MI)
- Blood clots in a brain artery cause a stroke (CVA)
- Blood clots in your leg veins cause a deep venous thrombosis (DVT). These blood clots can break off from the legs and go to the lungs causing a fatal pulmonary embolism (PE) and are known as venous thromboembolisms (VTE).
- Women with heredity conditions that cause clotting (example: deficiencies in protein C & S, anti-thrombin III, or Factor V Leiden) cause even higher rates of clotting.



#### MI: There is twice the risk of heart attack

- Women with no conventional risk factors (hypertension, hypercholesterolemia, diabetes, or smoking) who used the Pill had **twice** the risk of heart attack. The duration of the Pill use did not matter.(5)

Among women who had used the Pill, the risk of MI was highest among:

- Those with hypertension had **5** times the risk.
- Those who smoked had over **12** times the risk.
- Those who had diabetes had **16** times the risk.
- Those who had high cholesterol had **23** times the risk.



#### CVA: There is over twice the risk of stroke in women on the Pill

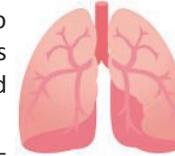
By a meta-analysis which combined the results of 16 studies, there is near 3 times the risk of ischemic stroke in women who used the Pill.

The risk is even higher with other risk factors. But for women who take birth control pills and smoke, have high blood pressure or have a history of migraine headaches, the stroke risk is significantly higher.(6)



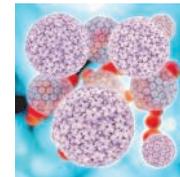
### VTE: There is two to three times the risk of lung blood clots in women on the Pill

- The Pill increases the risk of blood clots in the deep veins of women’s legs (DVT). If the blood clots in the legs break off (VTE) and lodge in the lungs, a pulmonary embolism (PE), can lead to death if the PE is large.
- By study, oral contraceptives increase the risk of deep venous thrombosis 5 times.(7)
- Pulmonary embolism in women who use the Pill for less than a year was **tripled** compared to women who did not use the Pill.
- The risk of pulmonary embolism decreased with decreasing doses of estrogen in the Pill.
- Pulmonary embolism increased dramatically by 60-80% if the Pill had androgenic progestins, as found in Yaz and Yasmin, such as desogestrel, gestodene, drospirenone, and cyproterone.(7,8)
- The Ortho-Evra patch used for contraception causes clots higher than the rates with the Pill as the patch causes 60% higher estrogen levels than in the Pillusers.



### 2 Women on the Pill are more likely to develop potentially lethal infections

- Women on the pill **increased their risk of getting HIV infection by 60%** when compared to women not taking the pill.(9)
- Women on the pill were **twice as likely to transmit HIV** to their partner.
- Women on the pill were **twice as likely** to get infected with **HPV** (human papilloma virus) which causes cervical cancer.(10)



### 3 The Pill can cause breast cancer

- **Since 1975**, the risk of in-situ breast cancer has increased 400% in premenopausal women. Invasive cancers have increased 40% overall in the U.S.
- **In 2000**, the National Toxicology Advisory Panel put estrogen on its list of carcinogens. There are metabolites of estrogen which directly damage DNA causing mutations and cancer.
- **In 2006**, a meta-analysis in the Mayo Clinic Proceedings showed a 44% increase risk of breast cancer in women who took the Pill before having a child.(11)
- **In 2007**, the UN’s International Agency on Research of Cancer (IARC) reported in their Monograph 91 that estrogen-progestin combination drugs (the Pill) were a group 1 carcinogen for breast, cervical and liver cancers.(12) Although the risk of uterine and ovarian cancers were lower on the pill, there is 4 times more breast cancer in women than uterine and ovarian cancers combined.
- **In 2009**, Dolle showed a 320% increase risk of triple negative breast cancer in women on the Pill, which is the most difficult and deadly form of breast cancer to treat.(13)



#### The Pill can cause cervical cancer

The risk of cervical cancer increases after more than five years on the Pill.

- Women who use the Pill for five to nine years have twice the risk of cervical cancer.
- Women who use the Pill for 10 years or more have more than three times risk of cervical cancer.(14)

#### The Pill can cause liver cancer

Primary liver cancer (hepatocellular carcinoma) is rare in developed countries and **the pill increases its risk over 50%** in women.(12) A meta-analysis of 12 studies showed the Pill increased liver cancer 50%. Six studies showed the longer the Pill is used, the higher the risk.

- The pill also increases the risk of benign tumors, hepatic adenomas and focal nodular hyperplasia (FNH) of the liver.