Teens Taking The Pill: Is It Safe? A Guide For Parents

When your teenager starts thinking about contraception, it can bring up a mix of emotions. You might feel protective, worried, or unsure of where to start. The best thing you can do as a parent is support them in making informed choices about their health.

The pill is one of the most common contraceptive choices for teens. But with so much information (and misinformation) out there, how do you know what to trust? This guide breaks down the research so you can help your teen in making the right decision for them.

What Is the Pill and How Does It Work?

"The pill" isn't just one kind of medication; there's a whole range of options with different hormone dosages and combinations. These fall into two main categories:

- 1. **Combined pills**¹ contain both oestrogen and progestin. They prevent ovulation (the release of an egg), thicken cervical mucus and thin the uterine lining.
- 2. **Progestogen-only pills**² (POP or mini pill) contain progestin but no oestrogen. They work by thickening the cervical mucus and thinning the uterine lining. Some types also stop ovulation.

Why Do Teens Use the Pill?

The pill isn't just about preventing pregnancy, it can be taken for a variety of health reasons. Understanding your teen's reason for wanting to take the pill can help guide their decision.

The pill can help manage:

Heavy and Irregular Periods

Anovulatory cycles³ (menstrual cycles without ovulation) are common in teen girls because the hormonal connection between the brain and ovaries is still maturing.

While developing follicles in the ovary produce oestrogen, progesterone isn't produced until after ovulation. Oestrogen builds up the uterine lining, while progesterone stabilises it. Without progesterone, the lining becomes thick and unstable, leading to heavy and unpredictable periods when it sheds.

For some teens, heavy periods can be difficult to manage. In some cases, hormonal treatments like the pill can help, especially if contraception is also needed. If unpredictable cycles are the main concern, the pill can provide a regular withdrawal bleed.

However, irregular periods are a normal part of puberty. If periods remain irregular beyond the first few years after menarche,⁴ it's worth investigating potential underlying causes like PCOS. If on the pill, she may need to stop temporarily to allow for accurate testing.

Painful Periods

Up to 90% of teens experience painful periods. For mild symptoms, self-management options like heat pads and exercise are the first line of treatment.

If more relief is needed, anti-inflammatory medications and/or hormonal contraception (like the pill) may be recommended. The best option depends on her symptoms, preferences, and whether an underlying condition like endometriosis is suspected, which may require the pill for treatment.

Acne

Mild acne is often treated with topical options like retinoids or benzoyl peroxide. If contraception is also needed, the pill can help treat acne^Z at the same time. For moderate to severe acne, the pill may be a first-line option if she needs contraception or prefers it after considering other treatments.

PCOS and Endometriosis

The pill can be effective for both PCOS and endometriosis but works differently for each condition.

- Endometriosis: the pill helps reduce pain by suppressing ovulation and thinning the uterine lining.⁸ This helps decrease inflammation and growth of endometrial-like tissue.
- PCOS: the pill can help regulate periods and lower androgen levels, which can reduce symptoms like acne, excess hair growth and hair thinning.

For more information on endometriosis and PCOS, check out our other articles.

Migraines and PMS Symptoms

The pill can help manage PMS symptoms and menstrual migraines, which are triggered by a drop in oestrogen levels around the time of a period. By providing a steady dose of hormones, the pill can help prevent the hormonal fluctuations that contribute to PMS symptoms.

However, for those with a history of migraines with aura, the combined pill may not be suitable due to a small increased risk of stroke. 11 Always discuss with your doctor first.

The Big Question: Is the Pill Safe for Teens?

The short answer: **Yes**, the pill is safe for most teenagers.

Most research on the pill focuses on adults, so there's still a lot we don't know about how it affects teens. Side effects are common¹² (especially during the first 3 months) but everyone experiences them differently.

Side effects may include:

- Nausea
- Headaches
- Sore breasts
- Mood swings
- Spotting (light bleeding between periods)

Beyond the typical side effects, you may be concerned about the pill's long-term impact on your teen's health.

Here's a quick summary:

- 1. **Mental Health:** Research is mixed, but some studies suggest the pill can negatively affect mood in teens.
- 2. **Bone Development:** Research shows the pill may slow bone development in teens, though this typically returns to normal after stopping.
- 3. **Future Fertility:** The pill does not affect long-term fertility but can mask underlying conditions.
- 4. **Blood Clots:** While the pill increases the risk of blood clots, teens are at a lower risk than adults.
- 5. **Weight Gain:** Although sometimes reported as a side effect (possibly due to water retention), there's limited evidence to support this link.

Does the Pill Affect Mood in Teens?

The link between the pill and mood changes has been debated for decades, with conflicting research results. It's difficult to confirm a direct cause-and-effect relationship because

adolescence is already a time of significant biological, psychological and social change, all of which can independently increase depression risk.

One key factor is puberty-related brain development, often called the "window of vulnerability", which makes teen girls more susceptible to depression¹³ than boys, despite similar rates pre-puberty.

To complicate things further, some girls will experience severe mood symptoms from their natural hormone cycles (such as premenstrual dysphoric disorder or PMDD) and for them, the pill may actually improve mood. they may get an *improvement* in their low mood symptoms with the pill.

What Does The Research Say?

Several large observational studies have reported that the pill **negatively affects mood in teens**.

- A Danish study found a small but significant increase in depression and antidepressant use among teens using hormonal contraception.¹⁴
- A Swedish study linked hormonal contraception to an increased need for anti-anxiety medication, with the strongest effect seen in teenagers.¹⁵
- A Dutch study found that 16-year-olds reported more depressive symptoms on the pill (like crying, excessive sleepiness and eating problems), while older age groups showed no difference.¹⁶

The Dutch researchers also accounted for other factors that could contribute to depression, including PCOS, endometriosis, a history of depression, and stressful life events. While these factors weakened the association, they didn't eliminate it completely. This suggests that starting hormonal contraception during a time of vulnerability may slightly raise the risk of depression in teens but not in older age groups.

However, other research found **no significant impact on mood**.

- A US randomised controlled trial (RCT) was the only RCT examining the pill's effect on teen mood. It found no significant difference in mood symptoms between those taking the pill and those given a placebo. 17 However, this is only one trial with a smaller sample size.
- Another small RCT in the US found no significant difference in mood between teens taking the pill and the placebo.¹⁸

Does the Pill Affect Bone Development?

Teen years are crucial for bone development, with bone mineral density (BMD) peaking by age 20.¹⁹ Since oestrogen supports healthy bone development, some worry about how the pill might impact this process.

Contraceptives that suppress oestrogen production (like the Depo Provera injection)²⁰ can lead to loss of bone density and are not recommended for teens.

A 2022 review²¹ found that the combined pill may **slow down bone development in teens**, especially pills with lower oestrogen doses (20-30µg).²² Further research found that adolescents who took the combined pill for two years developed less bone mass.²³ However, there's not much data on higher-dose pills or progestin-only options.

More research is needed to better understand the long-term impact of the pill on bone development in teens. The good news? Any minor effects on bone density seem to **reverse after stopping the pill**. Eating a balanced diet with plenty of calcium and vitamin D, combined with weight-bearing exercise, supports bone health whether on the pill or not.

Does the Pill Affect Future Fertility?

The idea that taking the pill as a teen can harm future fertility is **a misconception**. A review of more than 20 studies²⁴ found that 83% of people who stopped hormonal contraception conceived within a year. The type and duration of hormonal contraception don't seem to impact fertility.

There can be a short delay in the return of a regular menstrual cycle after you stop taking the pill, but these should return to normal within 6 months. If, after 6 months, you don't have a regular cycle, it's time to seek medical advice.

Does the Pill Increase the Risk of Blood Clots?

Blood clots (venous thromboembolism or VTE) are a rare but serious risk with the combined pill. For women who use the combined pill, their risk of VTE is 3-5 times higher than those who have never used it.²⁵

However, the risk of blood clots is lower in teens compared to adults,²⁶ with a rate of 2.1 per 10,000 years of use, compared to 9.2 for women over 35. But if your teen has a family history of clotting disorders, smokes, or is overweight, these factors can increase their risk. One study found that smoking can increase the risk of VTE by up to 8.8 times.²⁷

It's also important to remember that pregnancy carries a much higher risk of VTE than the pill. If preventing an unwanted pregnancy is a concern, this risk should be weighed against the potential risks of not using the pill and the available alternatives.

Does the Pill Affect Weight Gain?

Concerns about weight gain are common among teens considering the pill, but there's limited evidence to support this link.

A comprehensive review of combination contraceptives found no strong evidence linking the pill to significant weight changes. Most studies showed little to no difference in weight between users of the combined pill and those taking placebos. A similar review on progestin-only contraceptives and weight found similar results. 30

Other research suggests that the type of contraception and a teen's BMI at the time of starting can play a role. For instance, one study found that overweight teens using the Depot injection were more likely to gain weight than those using oral contraceptives.³¹

While weight gain is a common concern, evidence doesn't support the pill causing weight gain in teens. Factors like baseline weight, type of contraception and lifestyle should all be taken into account when discussing the pill with your doctor.

Making Sense of the Evidence

Deciding whether to start the pill is ultimately your teen's choice but your support can make a real difference. It's important to listen without judgment, provide reliable information and encourage seeking help from a healthcare provider.

If you've had negative experiences with the pill, it can be hard to stay objective. But remember, your teen may not have the same experience.

There seem to be some risks unique to teens, with the slight increase in depression seen in some studies likely to be a concern for parents. Though the evidence is mixed, it's still an important consideration. If your teen decides the pill is right for her, it's crucial to understand how low mood might manifest and monitor her closely for any changes.

Starting the pill may coincide with big life changes, like going to university or college, which can also affect mood. If possible, it might be helpful to start the pill a few months before this transition so a healthcare provider can monitor her and adjust treatment if needed.

As with any medication, it's important to consider the risk of not using it. Conditions like acne, endometriosis and PCOS can worsen mood and quality of life if left untreated, while an unwanted pregnancy can have a serious psychological impact.

Ultimately, the decision should balance your teen's wishes, medical needs, previous history and any concerns. Hopefully, this article has provided a useful framework to guide your discussions with her and her doctor.

Sources:

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- 2. NHS: What is the progestogen-only pill?
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- 4. Menarche and Time to Cycle Regularity Among Individuals Born Between 1950 and 2005 in the US
- 5. The Treatment of Dysmenorrhea
- 6. NHS: Period pain
- 7. Hormonal Therapies for Acne: A Comprehensive Update for Dermatologists
- 8. Endometriosis UK: Hormone Treatments
- Contraception for Women with Polycystic Ovary Syndrome: Dealing with a Complex Condition
- 10. The Migraine Trust: Menstrual migraine
- 11. <u>Oral Contraceptive Use and Increased Risk of Stroke: A Dose-Response Meta-Analysis</u> of Observational Studies
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- 21. Effect of oral contraceptives on bone mineral density
- 22. Effect of two combinations of low-dose oral contraceptives on adolescent bone mass: A clinical trial with 2 years follow-up
- 23. Bone impact after two years of low-dose oral contraceptive use during adolescence

- 24. Return of fertility after discontinuation of contraception: a systematic review and meta-analysis
- 25. The risk of venous thromboembolism in oral contraceptive users: the role of genetic factors—a prospective cohort study of 240,000 women in the UK Biobank
- 26. <u>Use of Short Acting Reversible Contraception in Adolescents: The Pill, Patch, Ring and Emergency Contraception</u>
- 27. Choosing the Right Oral Contraceptive Pill for Teens
- 28. Venous Thromboembolism Risk Score and Pregnancy
- 29. Combination contraceptives: effects on weight
- 30. Progestin-only contraceptives: effects on weight
- 31. Overweight teens at increased risk for weight gain while using depot medroxyprogesterone acetate

Further Resources:

- NHS: Contraception
- FSRH: Contraception Choices
- The Lowdown: women's health review platform
- Fumble: the award-winning sex education charity
- Brook: your free & confidential sexual health & wellbeing experts