In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. This sheet talks about whether exposure to topical acne treatments may increase the risk for birth defects over that background risk. This information should not take the place of medical care and advice from your health care provider.

What are topical acne treatments?

Topical acne treatments are medications that are put directly on the skin. Topical acne treatments can be over-the-counter or prescription. Common active ingredients are benzoyl peroxide, azelaic acid, glycolic acid, and salicylic acid. Prescription acne medications include tretinoin, adapalene, dapsone, and antibiotics such as erythromycin and clindamycin.

Can I use tretinoin (Retin A®) for severe acne during my pregnancy?

Tretinoin is different from other topical treatments that will be discussed here. It belongs to a group of medications called retinoids, which can cause birth defects when taken by mouth. The amount of tretinoin absorbed through the skin is low, and studies have reported that women who used topical tretinoin during pregnancy did not have an increased risk for birth defects. However, due to the theoretical concerns and the availability of other topical acne products, tretinoin use is discouraged during pregnancy. Please refer to the MotherToBaby fact sheet Tretinoin and Pregnancy at https://mothertobaby.org/fact-sheets/tretinoin-retin-a-pregnancy/pdf/ and Isotretinoin and Pregnancy at https://mothertobaby.org/fact-sheets/isotretinoin-accutane-pregnancy/pdf/ for more information on this group of medications.

Can I use adapalene gel during my pregnancy?

Adapalene is a retinoid in the same group of medications as tretinoin. Studies have shown that only a small amount is absorbed through the skin when adapalene gel is used. Studies looking at adapalene in pregnancy include only a very small number of exposed pregnancies therefore, more studies are needed. Generally, better studied acne products are preferred for treatment in pregnancy.

Can I use topical dapsone during my pregnancy?

Studies have shown that only a small amount is absorbed through the skin when topical dapsone is used. Studies looking at topical dapsone in pregnancy include only a very small number of exposed pregnancies therefore, more studies are needed. Generally, better studied acne products are preferred for pregnancy.

Can using topical acne treatments affect my ability to get pregnant?

No, the use of topical acne treatments is not known to make it harder to become pregnant.

Are topical acne treatments generally safe to use during pregnancy?

While not well studied, over-the-counter skin treatments have not been associated with an increased chance for birth defects or other pregnancy complications when used during a pregnancy. Studies have shown that, in most cases, only 5% to 10% of the active ingredients are absorbed through the skin into your system. Since so little of the medication passes into the body, the amount that would reach a developing baby, if any, is unlikely to be a high amount.

If you apply acne treatments onto broken or very irritated skin, more of the active ingredients might be absorbed into your system. Also, many prescription products can have higher amounts of the active ingredients than over-the-counter products, so the amount of medication from the prescription topical treatments that is absorbed into
the body may be higher. However, even these amounts are not likely to cause harmful effects on the baby.

The American College of Obstetricians and Gynecologists (ACOG) recommends topical benzoyl peroxide, azelaic acid, topical salicylic acid and glycolic acid for treatment of acne in pregnancy.

I read that salicylic acid can cause birth defects in babies. Why is it safe to use as a topical treatment?

When a pregnant woman takes an adult dose (325 mg or higher) of aspirin (acetylsalicylic acid) by mouth, there may be a concern depending on the dose and how frequently she takes it. Aspirin is a related medication to topical salicylic acid. At doses used for pain relief, aspirin has been shown to interfere with the development of the baby in some reports. However, low dose aspirin (less than 81 mg/day) has been well studied in pregnancy and does not appear to increase the chance of birth defects or other pregnancy complications. When applied on the skin, the amount of salicylic acid that enters the body would be much less than when a woman takes low dose aspirin. For this reason, it is unlikely that topical salicylic acid would pose any risk to a developing baby.

Can using topical benzoyl peroxide during pregnancy cause birth defects or cause any problems in my pregnancy?

There are no studies looking at women who use topical benzoyl peroxide during pregnancy. However, because only about 5% of the amount applied on the skin is absorbed into the body, it is not likely to increase risk for birth defects or cause problems for the baby.

Will using the topical antibiotics, erythromycin and clindamycin, on my face during pregnancy increase the risk for birth defects or other pregnancy problems?

When used on your skin, only a small amount of these antibiotics would be absorbed into your system. This small amount is not thought to increase the chance for birth defects or other pregnancy problems.

What if my topical product contains a different active ingredient other than benzoyl peroxide, azelaic acid, or glycolic acid? Will it still be safe to use?

There are many topical acne treatments available over-the-counter or by prescription, and some of them may not contain the same active ingredients that are discussed in this fact sheet. If you have any questions about the active ingredients in your topical acne treatment, please contact MotherToBaby.

Is it safe to breastfeed while using any of these topical treatments?

Yes. Since so little of most of the topical treatments discussed are absorbed by the skin, there is little, if any, of the medication that will pass into the breast milk. However, make sure that the medication is not placed on the breast area or in any area that may come in contact with your baby’s skin before the medication has dried. Be sure to talk to your health care provider about all of your breastfeeding questions.

What if the father of the baby uses topical acne treatments?

There are no studies looking at possible risks to a pregnancy when the father uses topical skin treatments. In general, exposures that fathers have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures and Pregnancy at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/.

Please click here for references.