# What about Antivirals? February 16, 2020 By Rich Mancuso



Always speak to your doctor or medical professional before making any decision based on your personal health and well being when it comes to taking antiviral medication. Article below is for informational purposes only and is not to be used as a replacement for medical advice you have received from your doctor or medical professional. Always follow doctors orders.

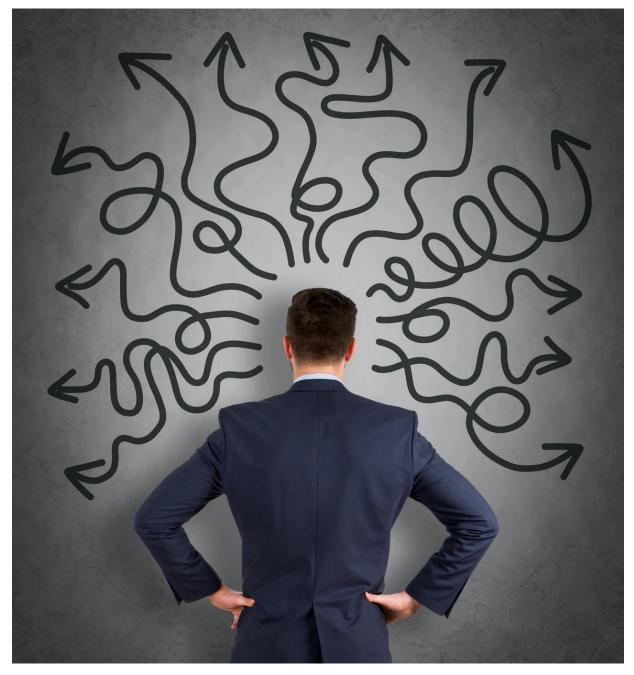
Many people who are newly infected with herpes assume that antivirals will kill the virus; this is not the case. Antivirals do not destroy herpes; they simply interrupt its reproductive capabilities. It's kind of like birth control for the virus. And we all know how effective birth control can be (hello, all the "oopsies" out there).

## So what's going on inside me?

Once the virus emerges from the nervous system and makes its way to the outer layer of the skin, it begins to replicate. Your immune system's response to the virus (how well it was able to identify the virus upon the first infection and any reoccurrences) will depend on how quickly it can attack and remove the virus that has made itself present. Some people will experience short periods of an outbreak lasting 3-5 days, and others may take more time (approx. 1-2 weeks). Your mileage may vary, which is why many opt to take antivirals for prevention and shorter healing time.

People who never experience outbreaks clearly have a very favorable response. Their immune system is working just fine, and they rarely need antivirals, if at all. The decision is yours, but the chances of you lowering your <u>risk factor</u> {1} any further will not be likely and very hard to measure. How low can you really go?

It's important to be well informed and to be aware of what you are putting in your body, including vitamins and supplements. Did you know that taking a daily dosage of antivirals longer than 6 months can decrease immunity to the virus over time (in most people). This is why many will experience an outbreak immediately after discontinuing their daily regiment. More info here {2}



In people who experience regular symptoms, it is evident that their immune response is not up to par. There are many reasons for this. Among them:

- 1. Their immune system did not get a good look at the virus during the first infection and was unable to create the proper antibody response.
- 2. Significant change or trauma has affected a person's immune system, allowing the virus to emerge.
- 3. A person may have autoimmune issues that prevent the immune system from working at its full potential and render it unable to create the proper antibody response.

In the end, what matters to a person is making these outbreaks and symptoms

simply go away, and antivirals are the only option for the moment.

In a basic sense, *antivirals act by impeding entry of viruses into host cells; interfering with viral assembly and inhibiting replication*. <u>Source</u> {3}. Antivirals will **NOT** prevent the infection of a person who has tested negative for herpes. Giving antivirals to a partner who is negative for herpes will not protect them from becoming infected, sorry.

Antivirals work best if they are taken within the first 24 hours of noticeable symptoms. It's important to note that it will take a few days to build up or accumulate these antiviral properties within your body in order to get the full benefit. This can be 3-7 days on average. Some people may still experience an outbreak because it started a few days before you noticed it. Most people will experience prodrome, tingling, or sharp pains right before an outbreak. This is the immune system engaging the virus. (Much of the factual research that backs this up has been done with herpes zoster and its relations to shedding). However, many people may not experience any prodrome at all when the virus makes its way to the original site of infection. These symptoms can vary greatly depending on your immune response.

#### **Antiviral brands**

"When it comes to the subject of antivirals, there are a few worth mentioning. Many of you are quite intimately acquainted with them. Acyclovir,® otherwise known as Zovirax,® is the oldest of the antiviral medications. Available since 1982 as a topical treatment, it wasn't until 1985 that it was made into a pill form for easy use. Years later, the FDA approved other drugs to treat genital herpes. Famciclovir® or Famvir® and Valacyclovir,® otherwise know as Valtrex.® Valtrex® was approved by the FDA at the end of 1995."

"It's important to note that these antivirals are not all the same. The difference between Valtrex<sup>®</sup> and Acyclovir<sup>®</sup> is "that when Valtrex<sup>®</sup> is absorbed, the liver converts it into Acyclovir<sup>®</sup>. This is so that the body absorbs most of the drug; as a consequence, this reduces the amount that needs to be taken. Famvir<sup>®</sup> is also a common drug made by a company called Novartis<sup>®</sup>. Much like Valacyclovir<sup>®</sup>, it works well and has a much longer duration and this means it can be taken less frequently than Acyclovir<sup>®</sup>."

"Of course, not all drugs work for everyone. I have heard many stories of a person taking a particular brand of antiviral with less than desirable results, but after switching to a different brand of antiviral, getting better results and more relief."

Information on antiviral comparisons paraphrased from eMed. com, WebMd. com, ashasexualhealth. org Excerpt From my book Asking for a friend. 2017© {4}

#### Do antivirals reduce the risk?

The quick answer is **yes**, in individuals who suffer regular outbreaks and symptoms, antivirals can reduce the risk and can reduce shedding of the virus, but

this is not 100%. Risk estimates fully explained here. {5}

- Daily suppressive therapy with Valacyclovir reduces risk of sexual transmission of herpes simplex virus type 2 (HSV-2) in HSV-2-serodiscordant heterosexual couples by 48%. <u>Source</u> {6}
- 2. Suppressive Acyclovir therapy can reduce the frequency of recurrences by approximately 75%.
- 3. Suppressive therapy reduces the frequency of asymptomatic shedding of HSV in the genital tract by more than 80%
- 4. Valacyclovir appear to be somewhat better than Famciclovir for suppression of genital herpes and associated shedding. <u>Source</u> {7}

While this information is factual, it is not without room for error when it mentions percentages and how well a person's immune system responds to the virus.



### Important note on antivirals

If a person is taking antivirals as prescribed, but they are not working, please communicate this with your doctor. Your doctor may change your dosage, or they can switch you to a different brand, as some people may get better results simply by trying a different brand.

# Should I take them or not?

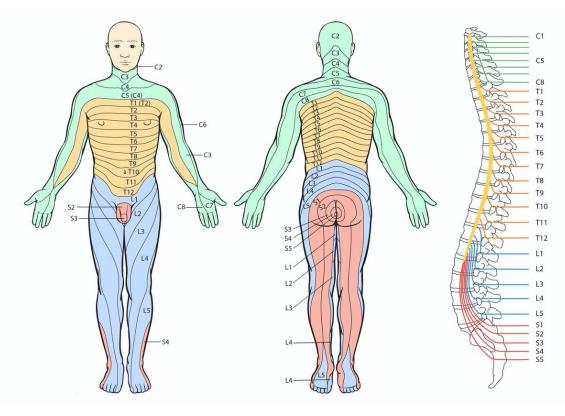
I can't tell you that, only your doctor can. Many will recommend that you take

them daily and others will suggest that you take antivirals only when needed, again **it's up to your doctor and your individual needs**. The idea of taking antivirals only when needed is common. The thinking here is that by not interfering with the infection process, you are allowing your body to learn and acclimate to the virus. If this is a new exposure to the virus (not a dormant previous exposure), over the next few months your body will be working very hard at identifying the **proteins** that make up the herpes simplex virus (**75 of them**) and will hopefully make antibodies for all of them, creating a very favorable immune response. With any luck, this first outbreak will be the only one that you experience, and you will never see another outbreak ever again. This is common with most people on the planet who acquire herpes.

It is highly unfortunate for a small population of people who carry herpes (about 100 + million or so) who will experience constant symptoms and outbreaks. These people are left with very few options, and antivirals may be the only option that works for them. Whether or not a person decides to begin or stop taking medication is a personal choice, and this should be discussed with their OBGYN, personal doctor, or other medical professional. I do not make any recommendations on this matter.

#### Can I have sex during an outbreak if I am taking antivirals?

It is not recommended, even if you cover the outbreak. Whether you are taking antivirals or not, it will not stop an active outbreak from being highly infectious. An outbreak is a substantial amount of infectious material and should not be played around with. I know some people are giving bad advice by saying you can have sex during an outbreak as long as you cover it, but this is medically irresponsible and terrible advice. This is because you may be shedding viral material from other areas of your body that may have been previously infected, but you are entirely unaware. It's true that at the end of the day, it's always *your body – your choice*, however, I would simply ask that you consider the following as food-for-thought... The herpes simplex virus will infect one <u>dermatome {8}</u> (specific sections of your body) at a time and, as a general rule, will move back and forth through the original nerve branch of that infection. This is why many people see outbreaks in the same area every time.



Credit; https://www.aic.cuhk.edu.hk/web8/Dermatomes.htm

I don't know about you, but most people that have sex are doing more than one thing and more than just one single position, so the chances of introducing the virus to other dermatomes (during the first infection or other recurrences) are probable. Still, you may never know this unless you experience an outbreak in that area as proof positive. This is one of a few reasons why you should not be messing around with an active outbreak, antivirals or not. More info here.{9}

### **Antiviral Resistance.**

"While the invention of antivirals has helped many millions of people get through their daily lives, there is a percentage of the population for whom these medications just don't work. Many people wonder why antiviral medication doesn't work for them, and even after switching to a different brand, they still fail to see any improvements with their symptoms. It would be a guess to pinpoint the exact reasons for this (for a specific individual and their symptoms), but there may be an explanation hiding within. It has much to do with the words "mutation," and "antiviral resistance."

Article <u>Here.</u> {10}

# Side Effects.

For most people, antivirals are quite safe. However, there are always side effects when it comes to Drugs.

Side effects of Acyclovir. <u>Source</u> {11} <u>WebMd</u> {12} Side effects of Valtrex. <u>Source</u> {13}

# So what do I do now?

It's really up to you and your doctor. It's your body and your choice. For most people, antivirals are safe and quite tolerable. Many physicians that are familiar with herpes may send you for regular blood work every 6 months if you're on medication. This is to monitor your kidney and liver enzymes (if you are a patient that takes antivirals on a daily basis for suppression). It's a standard procedure and most will never have problems, but some may experience kidney issues. Usually, though, antivirals have a very short life inside the body and rinse out pretty quickly through urination. This is why some people who miss a dose may experience symptoms within a day or two.

# Will it protect my partner?

Taking antivirals may also be something to consider if your significant other is sero-negative for herpes simplex and you wish to **partially** protect them from becoming infected. By-the-way, antivirals do not provide 100% protection.

#### The big debate.

Okay, there is a significant number of opinions when it comes to the subject of taking antivirals for people who do NOT experience symptoms or outbreaks. I have heard a few scientists say. . .

• "If you do not experience outbreaks or symptoms, taking antivirals may not be of significant value. Your immune system is working very well, and the risk of passing on the virus is already quite low. If you are not experiencing outbreaks, it would seem that your body is doing way better than suppressive therapy ever could (considering antivirals only have an average efficacy of 50%). Besides, taking antivirals for more than six months can deplete some of your antibody response, {2} and that is why some patients experience regular outbreaks after discontinuing their daily antiviral regiment."

I have also heard the counter-argument from other scientists. . .

• "Yes, it's true that antivirals are not 100% or have high efficacy. However, since we cannot predict how often an individual may or may not be shedding (unless shedding tests were performed on the patient), there's no guarantee that a seropositive individual without symptoms or outbreaks is always 100% safe and not shedding. Taking antivirals can still reduce titers, frequency, and possible transmissibility of any shedding."

If you **do** experience symptoms and outbreaks, taking antivirals will indeed lower your risk substantially. That's a fact.

So, what do you do? Well, at the end of the day, the decision to take or not take antivirals is entirely up to you, your partner, and your doctor. I cannot tell you what would be best for you, because I'm not you. I am simply providing you with the information in an effort to help you understand this complexity. Remember, there will always be a risk within the realm of herpes, whether it is low or high.

# Sorry for TMI.

I know this is a lot of information and it can confuse people, so I apologize for overloading you. As you might suspect, this is probably why many doctors will give you basic answers to your questions with no elaboration to the extent that I have. Doctors have limited time to spend with each patient, so unless you come prepared with all of your questions written down beforehand, you likely won't have much time to sit and think some up during your appointment.

When I was diagnosed (over 30 years ago), the answers to my hundreds of questions were simply not available. This is my attempt at giving you the "Full Monty" of information. Why? Because you deserve to be fully informed in making the best decision that works for you and I hope I helped. I wish you the best of luck and good health.

## **References:**

- {1} <u>https://askingforafriend.us/articles/f/what-is-the-risk-of-getting-herpes</u>
- {2} Antibody depletion due to suppressive daily therapy. <u>https://askingforafriend.us/articles/f/the-downside-of-daily-antiviral-therapy</u> <u>https://pubmed.ncbi.nlm.nih.gov/26670699/</u> <u>https://pubmed.ncbi.nlm.nih.gov/3183633/</u> <u>https://liveherpesvaccine.files.wordpress.com/2016/06/gold-et-al-1988.pdf</u> <u>https://pubmed.ncbi.nlm.nih.gov/2848900/</u>
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- {6} Daily Acyclovir to Decrease Herpes Simplex Virus Type 2 (HSV-2) Transmission From

HSV-2/HIV-1 Coinfected Persons: A Randomized Controlled Trial <u>https://www.ncbi.nlm.nih.gov/pubmed/23901094</u>

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- {8} <u>https://emedicine.medscape.com/article/1878388-overview</u>
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{13} <u>https://www.webmd.com/drugs/2/drug-14126/valtrex-oral/details</u>

Other sources:

Human Herpes viruses: Biology, Therapy, and Immuno-prophylaxis. <u>Source</u> Herpes Simplex Virus Resistance to Acyclovir and Penciclovir after Two Decades of Antiviral Therapy Source <u>Source</u>

New therapies for drug-resistant herpes Source

ANTIVIRAL SHEDDING REDUCTION (Daily Regimen)

Daily suppressive therapy with Valacyclovir reduces risk of sexual transmission of herpes simplex virus type 2 (HSV-2) in HSV-2-serodiscordant heterosexual couples by 48%.

Daily acyclovir to decrease herpes simplex virus type 2 (HSV-2) transmission from HSV-2/HIV-1 coinfected persons: a randomized controlled trial. <u>Source</u> Suppressive Acyclovir therapy reduces the frequency of recurrences by approximately 75%

# Suppressive therapy reduces the frequency of asymptomatic shedding of HSV in the genital tract by more than 80%

(Wald et al., 1997; Wald et al., 1996) (Table 64.2). The Acyclovir dose when used as suppressive therapy is 400 mg administered twice daily (Table 64.1). <u>Source</u> Valacyclovir appear to be somewhat better than Famciclovir for suppression of genital herpes and associated shedding.

Comparative efficacy of famciclovir and valacyclovir for suppression of recurrent genital herpes and viral shedding. <u>Source</u>

Optimal management of genital herpes: current perspectives <u>Source</u> Antiviral therapy of HSV-1 and -2 <u>Source</u>

#### Antiviral treatment of genital herpes

Disease/kind of therapy	Acyclovir	Valacyclovir	Famciclovir
Primary genital herpes	3× 400 mg orally per day for 7–10 days 5× 200 mg orally per day for 7–10 days	$2 \times 500$ mg orally per day for 7–10 days	3× 250 mg orally per day for 7–10 days
Severe cases of primary genital herpes	3× 5 mg/kg body weight intravenously for 5–7 days, under immunosuppression for 10 days		
Primary genital herpes in pregnant women <sup><math>\underline{a}</math></sup>	$5 \times 200$ mg orally per day for 10 days		
Recurrent genital herpes (<5 recurrences per year) $\frac{b}{}$	2× 800 mg orally for 5 days	$2 \times 500$ mg orally for 3 days	$2 \times 125$ mg orally for 5 days
	3× 400 mg orally for 5 days 3× 800 mg orally for 2 days	$1 \times 1,000$ mg orally for 5 days	$2 \times 1,000$ mg orally for 1 day
Recurrent genital herpes in pregnant women	3× 400 mg orally from 36th gestational week until delivery	$2 \times 250$ mg orally for 3 days from 36th gestational week until delivery	
Preventive therapy before delivery	$2 \times 400$ mg orally for maximally 6 months		
Suppressive therapy (≥5 recurrences per year)	2× 400 mg orally for maximally 6 months 4× 200 mg orally for maximally 6 months	$1 \times 500$ mg orally for maximally 6 months	2× 250 mg orally for maximally 6 months

#### Notes:

<sup>a</sup>Acyclovir is not approved during pregnancy (off-label use). Administration should be especially avoided before the end of 14th gestational week. <sup>b</sup>In mild cases, acyclovir or foscarnet sodium may be administrated topically, but this is not sufficient especially during pregnancy. For more information, see Gupta et al,<u>34</u> Centers for Disease Control and Prevention<u>51</u> and German STI-Society.<u>62</u>

#### Source: NIH

"How did you get herpes? It's really quite simple. You're a human being and you're alive. Welcome to the planet."

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