## STUDY BUFFALO INTERNIET EDUCATION

I'm a varicella-zoster virus particle from the herpes virus family!

I cause chicken pox and shingles!

Varicella hides out inside nerves cells like me

The virus can remain dormant for years and years until something weakens the immune system and lets it spread throughout the body again!

This recurrence is now known as shingles!



Following an infection I stick around as a memory cell so that when the infection returns I can take care of it before you even know you had it!

Over time these memory cells decrease in number and so it is possible to lose your immunity to infections. However, this is why we have booster vaccinations! These re-trigger the immune response and leaves you with lots of new memory cells!



Some people get re-infected and others do not. The exacts reasons are not known. The Study Buffalo would blame it on a weakened memory. If your body doesn't respond fast enough you can get re-infected. This means you could catch chicken pox again or develop shingles! The reasons for this weakened memory could be due to genetics (e.g. bad luck on the VDJ and HLA genes), aging, or immunosuppression.





