

Peer-reviewed studies documenting cases of shingles following varicella vaccination.

by [Gary S. Goldman, Ph.D](#)

2009 Nov

Comments from Gary Goldman, researcher on the below article:

The author is incorrect in many factual points in the above narrative. Let's restrict comments to this particular sentence, ***"And getting chickenpox as a child puts a person at risk of getting shingles when older, whereas there is no evidence that a chickenpox vaccination does."***

Actually, here are just a few peer-reviewed studies documenting cases of shingles following varicella vaccination.

Matsubara K, Nigami H, Harigaya H, Baba K. Herpes zoster in a normal child after varicella vaccination. *Acta Paediatr Jpn* 1995 Oct; 37(5):648–50.

Hammerschlag MR, Gershon AA, Steinberg SP, Clarke L, Gelb LD. Herpes zoster in an adult recipient of live attenuated varicella vaccine. *J Infect Dis*, 1989 Sept; 160(3):535–7.

Uebe B, Sauerbrei A, Burdach S, Horneff G. Herpes zoster by reactivated vaccine varicella zoster virus in a healthy child. *Eur J Pediatr*, 2002 Aug; 161(8):442–4.
A 27-month-old girl developed an impressive herpes zoster infection 16 months after varicella vaccination that was localized in three adjacent cervical dermatomes. VZV vaccine stain was identified by polymerase chain reaction.

Naseri A, Good WV, Cunningham ET Jr. Herpes zoster virus sclerokeratitis and anterior uveitis in a child following varicella vaccination. *Am J Ophthalmol*, 2003 Mar; 135(3):415–7.

Binder NR, Holland GN, Hosea S, Silverberg ML. Herpes zoster ophthalmicus in an otherwise-healthy child. *J AAPOS*, 2005 Dec; 9(6):597–8.
A case of pediatric herpes zoster ophthalmicus in a child that had been vaccinated against varicella and otherwise had no known exposure to varicella-zoster virus and the initial presentation of HZO was a painful and diffuse subconjunctival hemorrhage that appeared before any of its classic signs were observed.

Kohl S, Rapp J, La Russa P, Gershon AA, Steinberg SP. Natural varicella-zoster virus

reactivation shortly after varicella immunization in a child. *Pediatr. Infect. Dis J.* 1999 Dec;18(12):1112–3.

Twelve days following varicella vaccination in his right arm, a 6-year-old male developed wild-type herpes zoster rash on his back and left arm.

Levin MJ, Dahl KM, Weinberg A, Giller R, Patel A, Krause PR. Development of resistance to acyclovir during chronic infection with the Oka vaccine strain of varicella-zoster virus, in an immunosuppressed child. *J Infect Dis.* 2003 Oct 1;188(7):954–9.

A 1-year-old boy was vaccinated with the Oka strain of varicella just prior to the discovery of a tumor that required intensive antitumor therapy. Three months later he developed herpes zoster, which developed into chronic verrucous lesions that were refractory to treatment with acyclovir and which subsequently disseminated. DNA from a biopsy specimen of a chronic herpes-zoster lesion indicated that the Oka vaccine strain of the virus caused this severe complication. Analysis of this viral DNA demonstrated a mutation in the viral thymidine kinase gene. Plasmids containing this altered gene were unable to produce functional thymidine kinase in an in vitro translation system. The presence of this mutation would explain the clinical resistance to acyclovir. This is the first report of Oka-strain varicella virus causing severe disease after reactivation and of resistance to acyclovir during an infection caused by this virus.

Ota K, Kim V, Lavi S, Ford-Jones EL, Tipples G, Scolnik D, Tellier R. Vaccine-strain varicella zoster virus causing recurrent herpes zoster in an immunocompetent 2-year-old. *Pediatr Infect Dis J.* 2008 Sep;27(9):847–8.

Varivax III is a live attenuated vaccine against varicella zoster virus (VZV). The authors report “a case of recurrent vaccine-strain herpes zoster in an immunocompetent 2-year-old child.” This report aims to alert physicians that recurrent vaccine-strain herpes zoster can be a rare complication of VZV vaccination in apparently immunocompetent hosts.

Iyer S, Mittal MK, Hodinka RL. Herpes Zoster and Meningitis Resulting From Reactivation of Varicella Vaccine Virus in an Immunocompetent Child. *Ann Emerg Med.* 2008 Nov 22.

Herpes zoster complicated by meningitis has been mainly reported in immunocompromised patients after reactivation of wild-type varicella-zoster virus. We present one of the first cases of aseptic meningitis after herpes zoster caused by reactivation of vaccine-type varicella-zoster virus in an immunocompetent child. We also highlight the increasing role of both wild-type and vaccine strains of varicella-zoster virus as a cause of viral meningoencephalitis and the use of appropriate laboratory tools to rapidly and accurately identify the virus in order to provide prompt

patient care and management.

Here are some first-hand experiences sent referred to me directly:

On November 5, 2007, parents of a daughter with shingles wrote Dr. Goldman: “A friend of mine e-mailed me a link to an article you had written regarding the chickenpox vaccine. Our oldest daughter who is only 16 recently suffered from her second bout with shingles. She first had an episode of shingles at the age of 13. Our daughter NEVER had chickenpox, but was given the varicella vaccine in 1995. We were never told or even warned that it could cause shingles. We find it unbelievable that the ‘solution’ we are being provided is to go to the Infectious Disease Department at a local University Hospital in order to have them ‘help us manage’ this for the rest of our daughter’s life. Now we have to remedy the shingles and we are altogether convinced that there will be many, many other young people adversely affected by what is a dangerous vaccine with awful side effects that stay with you for a lifetime...far worse than chickenpox in one’s youth. Our daughter missed a week of school each time and suffered incredibly....”

On September 22, 2008, a nurse telephoned Dr. Goldman to report the following: “My son, who had natural chickenpox at 3 years of age, and who is now 16 years old, has been recovering for the past 6½ months from herpes zoster (with a rash in the T1 dermatome). He experienced vomiting and severe headaches that lead to a diagnosis of viral meningitis from central nervous system (CNS) complications of herpes zoster.”

Interestingly, the nurse indicated that the physician treating her son had encountered another teen with the same diagnosis a week prior to her son’s case.

Sincerely,
Gary S. Goldman, Ph.D.

Gary Goldman
Nov. 1, 2009 at 12:15am

Varicella (chickenpox) and herpes zoster (shingles) both develop from the same varicella-zoster virus (VZV). As varicella vaccination became more widespread, incidence of shingles among adults has nearly doubled. This is due to an immunologically-mediated link between varicella and herpes zoster. Adults used to receive a natural boost from children with chickenpox in the community. This boosted the adults' cell-mediated immunity to help suppress or postpone the reactivation of herpes zoster.

Summary statement regarding the Universal Varicella Vaccination Program

Prior to the universal varicella vaccination program, 95% of adults experienced natural chickenpox (usually as school age children) these cases were usually benign and resulted in long term immunity. This high percentage of individuals having long term immunity has been compromised by mass vaccination of children which provides at best 70 to 90% immunity that is temporary and of unknown duration- shifting chickenpox to a more vulnerable adult population where chickenpox carries 20 times more risk of death and 15 times more risk of hospitalization compared to children. Add to this the adverse effects of both the chickenpox and shingles vaccines as well as the potential for increased risk of shingles for an estimated 30 to 50 years among adults. The Universal Varicella (Chickenpox) Vaccination Program now requires booster vaccines; however, these are less effective than the natural immunity that existed in communities prior to licensure of the varicella vaccine. Routine vaccination against chickenpox has produced continual cycles of treatment and disease.

Gary Goldman

"It turns people into pathogen carriers and provides viruses with convenient hiding places."

"But among pregnant women, who can go to the front of that line, three-fourths aren't getting vaccinated,"

http://www.sciencenews.org/view/generic/id/48976/title/From_the_infectious_diseases_meeting_Whats_with_the_vaccine-o-phobia%3F

From the infectious diseases meeting: What's with the vaccine-o-phobia?

Science News writer Nathan Seppa talks with physicians about people opting out of vaccinations

By [Nathan Seppa](#)

Web edition : 2:09 pm

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PHILADELPHIA - For the folks who promote vaccination, these are trying times. Recently, CNN hosted a segment titled: "Virus or Vaccine: Which is Worse?"

It's enough to set Paul Offit to ranting, which he did this week at a meeting of the Infectious Diseases Society of America. Offit, a physician who heads the infectious disease division at Children's Hospital of Philadelphia, has devoted a career to fighting illness. In his job, vaccines are often the most reliable weapon available, and cost-effective to boot. And although it's astonishingly more dangerous to contract a

disease than it is to get vaccinated for it, that message seems to have gotten lost somewhere along the way.

Offit traces this detour back to 1982, when DPT – the shot that prevents diphtheria, tetanus and pertussis – was (wrongly) linked to brain damage. “Three people believed their kids were harmed by the vaccine,” he says.

Offit has compassion for families who have a child who has suffered, whatever the cause may be, known or unknown. But since 1982, it’s been one accusation after another against vaccines. People tried to link the HIB vaccine to diabetes (no evidence), the hepatitis B vaccine to multiple sclerosis (all but one study found no link), and other vaccines to SIDS or autism. Recently, the HPV vaccine – which prevents cervical cancer – got linked to heart attacks and strokes (no proof).

And now the seasonal flu vaccine and H1N1 flu vaccine are being skipped by millions of people who somehow distrust the science that went into making them, even though the illnesses they cause can be fatal.

But hey, it’s a free country. Paul Offit just throws up his hands: “Is it your right to catch and transmit a potentially fatal infection? The answer is ‘yes,’” he says.

Mary Ann Jackson, a physician who heads the infectious disease section at Children’s Mercy Hospitals and Clinics in Kansas City, Mo., investigates vaccination rates among specific groups. She says that the new generation of people dodging vaccines includes many white, college-educated women, often young mothers who get their information from the Internet. The odd part, Jackson says, is that these same women are also health-conscious, seat-belt-buckling folks. “They are trying to choose what’s best for their children. They want it to be their own decision,” she says.

Unfortunately, avoiding vaccination has consequences beyond one household. It turns people into pathogen carriers and provides viruses with convenient hiding places. “Herd immunity is eroding to the point that we’re now seeing outbreaks of preventable diseases,” says Offit. In 2004, for example, the United States experienced its worst outbreak of whooping cough (pertussis) in years. Mumps has also cropped up. Daycares have become high-risk areas because they’ve got a population of children who are relatively under-vaccinated, he says. “Doctors are worried about their waiting rooms being dangerous places.”

William Schaffner, a physician who chairs the Department of Preventive Medicine at Vanderbilt University, cited a recent round of focus groups held to discuss vaccines. Some people voiced doubts about vaccine safety. But Schaffner was impressed by one

group of participants who were adamantly in favor of vaccination: immigrants from developing countries. “They knew about these diseases,” he says.

Meanwhile, infectious disease experts have little use for “natural exposure” adherents, which include parents who have been known to host chickenpox parties or who otherwise intentionally expose their children to a disease rather than get the kids vaccinated. Chickenpox is far from harmless. While most cases in young children are indeed benign, older children and adults can get terrible illnesses. And getting chickenpox as a child puts a person at risk of getting shingles when older, whereas there is no evidence that a chickenpox vaccination does.

It’s easy to see why these scientists get frustrated. But sometimes not even a barrage of facts helps their cause. Ronald Reagan famously said, “Facts are stupid things.” Maybe so, maybe no.

For example, the vaccine for H1N1 flu is now being distributed nationwide. But among pregnant women, who can go to the front of that line, three-fourths aren’t getting vaccinated, even though H1N1 is particularly lethal for them and as if that weren’t enough it poses risks to their fetuses. Facts are scary things.

Health-care workers, another bunch who should know better, also don’t necessarily get vaccinated. Jackson was shocked to find flu vaccination rates of only 50 percent among hospital workers she studied.

So despite vaccines’ overwhelming safety profile when compared to the risks run by exposure to the diseases they prevent, and despite the exhortations of the CDC and World Health Organization, some people just gravitate toward other sources of information they deem more reliable.

“There’s a post-modernist notion that all levels of belief are acceptable,” Offit says.

The vaccine disconnect brings to mind a bumper sticker seen a few years ago, when some school boards and even the state of Kansas were openly advocating the teaching of an alternative explanation to counter Darwin’s theory of evolution.

The bumper sticker read: “What’s next gravity?”