

# Chicken pox vaccine associated with shingles epidemic

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## **New research published in the International Journal of Toxicology (IJT) by Gary S. Goldman, Ph.D., reveals high rates of shingles (herpes zoster) in Americans since the government's 1995 recommendation that all children receive chicken pox vaccine.**

Goldman's research supports that shingles, which results in three times as many deaths and five times the number of hospitalizations as chicken pox, is suppressed naturally by occasional contact with chicken pox.

Dr. Goldman's findings have corroborated other independent researchers who estimate that if chickenpox were to be nearly eradicated by vaccination, the higher number of shingles cases could continue in the U.S. for up to 50 years; and that while death rates from chickenpox are already very low, any deaths prevented by vaccination will be offset by deaths from increasing shingles disease. Another recent peer-reviewed article authored by Dr. Goldman and published in *Vaccine* presents a cost-benefit analysis of the universal chicken pox (varicella) vaccination program. Goldman points out that during a 50-year time span, there would be an estimated additional 14.6 million (42%) shingles cases among adults aged less than 50 years, presenting society with a substantial additional medical cost burden of \$4.1 billion. This translates into \$80 million annually, utilizing an estimated mean healthcare provider cost of \$280 per shingles case.

After a child has had varicella (chickenpox), the virus becomes dormant and can reactivate later in adulthood in a closely related disease called shingles--both caused by the same varicella-zoster virus (VZV). It has long been known that adults receive natural boosting from contact with children infected with chicken pox that helps prevent the reactivation of shingles.

Based on Dr. Goldman's earlier communications with the Centers for Disease Control and Prevention (CDC), Goldman maintains that epidemiologists from

the CDC are hoping "any possible shingles epidemic associated with the chickenpox vaccine can be offset by treating adults with a 'shingles' vaccine." This intervention would substitute for the boosting adults previously received naturally, especially during seasonal outbreaks of the formerly common childhood disease.

"Using a shingles vaccine to control shingles epidemics in adults would likely fail because adult vaccination programs have rarely proved successful," said Goldman. "There appears to be no way to avoid a mass epidemic of shingles lasting as long as several generations among adults."

Goldman's analysis in IJT indicates that effectiveness of the chickenpox vaccine itself is also dependent on natural boosting, so that as chickenpox declines, so does the effectiveness of the vaccine. "The principal reason that vaccinees in Japan maintained high levels of immunity 20 years following vaccination was that only 1 in 5 (or 20%) of Japanese children were vaccinated," he said. "So those vaccinated received immunologic boosting from contact with children with natural chickenpox. But the universal varicella vaccination program in the U.S. will nearly eradicate this natural boosting mechanism and will leave our population vulnerable to shingles epidemics."

For decades it was thought shingles increased with age as older individuals' immune systems declined. However, Goldman's new research shows this phenomenon seemed primarily due to the fact that older people received fewer natural boosts to immunity as their contacts with young children declined.

Gary S. Goldman, Ph.D. served for eight years as a Research Analyst with the Varicella Active Surveillance Project conducted by the Los Angeles County Department of Health Services (LACDHS). The project was funded by the CDC.

About Gary S. Goldman, Ph.D.: Currently serves as Founder and Editor-in-Chief of the peer-reviewed medical journal Medical Veritas ([www.MedicalVeritas.com](http://www.MedicalVeritas.com)). Has recently authored five manuscripts concerning varicella, herpes zoster, and capture-recapture published in the European journal called Vaccine.

Research published in the International Journal of Toxicology, 24(4):205-213, Universal Varicella Vaccination: Efficacy Trends and Effect on Herpes Zoster. Also, Vaccine, 23(25):3349-3355, Cost-benefit analysis of universal varicella

vaccination in the U.S. taking into account the closely related herpes zoster epidemiology.

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