

## Shedding

# Shedding

ONE HUNDRED AND FIFTY-TWO (and counting) scientific studies on vaccines and SHEDDING:

Note: Also click [home](#) to see the main database for over 130 other categories on the science and the dangers of vaccines.

### Abortive and subclinical poliomyelitis in a family during the 1992 epidemic in The Netherlands.

"We describe a case of abortive poliomyelitis due to poliovirus type 3 (PV3) in an unvaccinated woman and a subclinical poliovirus infection in her family during an epidemic in the Netherlands. The woman excreted the epidemic strain (PV3) for 7 weeks. Her two children received oral attenuated poliovirus vaccine and were subsequently found to excrete PV1 and PV2 vaccine strains in addition to the epidemic PV3 strain. Her husband, who had neutralizing antibodies to all three poliovirus types because of previous vaccination, initially excreted no virus; subsequently, however, the vaccine strain PV1 and the epidemic strain PV3 could be cultured from his feces."

[#Recently](#) [#Vaccinated](#) [#Shedding](#) [#Polio](#) [#Vaccine](#) [#MedScienceResearch](#)

<https://www.ncbi.nlm.nih.gov/m/pubmed/7742455/>

### Accidental vaccinia of the vulva.

"Vaccinia of the vulva in a 32-year-old married woman is described. The vaccination was apparently due to a heteroinoculation from her husband during sexual contact. Clinically it presented as an indurated ulcer with a few isolated umbilicated vesicles and was associated with an acute biological false-positive serological reactions."

[#Shedding](#) [#Smallpox](#) [#Genital](#) [#Sexual](#) [#Transmission](#) [#Vaccine](#) [#MedScienceResearch](#)

<https://www.ncbi.nlm.nih.gov/m/pubmed/1017236/>

### ● Accidental vaccinia vulva vaginitis.

"A thirty year old woman in whom an uncommon complication of smallpox vaccination developed is presented herein. In this case, virus was transmitted from the recently vaccinated child to the vulva and the vagina of the incompletely immune mother. The diagnosis was confirmed by a viral culture and a direct smear."

[#Shedding](#) [#Smallpox](#) [#Genital](#) [#Transmission](#) [#Vaccine](#) [#MedScienceResearch](#)

<https://www.ncbi.nlm.nih.gov/m/pubmed/7428429/>

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**[Acute maternal anterior poliomyelitis in a non-endemic zone].**

“The authors report the case of a 26 year old woman with acute anterior poliomyelitis contracted during the vaccination of her baby. Despite having been herself vaccinated in infancy she was not protected against the poliovirus. The clinical interest of this uncommon case is a severe paralytic state with definitive paraplegia.”

#Recently #Vaccinated #Shedding

#Polio #Paralysis #Neurological #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/2561040/>

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**Aseptic meningitis after transmission of the Leningrad-Zagreb mumps vaccine from vaccinee to susceptible contact.**

Vukić BT, et al. Vaccine. 2008.

No abstract available

PMID 18639602

#Recently #Vaccinated #Shedding #Mumps #Meningitis

#Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/18639602/>

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**Canine parvovirus post-vaccination shedding: Interference with diagnostic assays and correlation with host immune status.**

No abstract available

PMID 28283075

#Shedding #Veterinary #Parvo

#Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/28283075/>

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**CASE OF VACCINE-ASSOCIATED MEASLES FIVE WEEKS POST-IMMUNISATION**

#Measles #Shedding #Vaccine #Failure #MedScienceResearch

<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=20649>

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**Case report: probable transmission of vaccine strain of yellow fever virus to an infant via breast milk.**

#Breastfeeding #Seizures #Shedding #Yellow #Fever #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3050973/>

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**Characterisation of poxviruses from sporadic human infections.**

"An orthopoxvirus was isolated from the vesicular rash of a man in Natal who died in coma and who had not been vaccinated. Analysis of the viral DNA showed that it was a vaccinia virus, more closely related to the virus of South African smallpox vaccine than to other vaccinia viruses."

"Minor biological differences between the viruses isolated and the corresponding vaccine strains suggested that some natural transmission of the virus had occurred, but the results of DNA analysis implied that they originated from the use of smallpox vaccine."

#Shedding #Death #Smallpox #Dermatological #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/2892275/>

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### **Characteristics of poliovirus strains from long-term excretors with primary immunodeficiencies.**

"Individuals who are deficient in humoral immunity are particularly at risk from infection with enteroviruses, and poliovirus in particular, where antibodies are the main source of protection from disease. Long-term excretion of vaccine strains of poliovirus has been documented for many years and instances of paralytic poliomyelitis in hypogammaglobulinaemic patients who were subsequently found to have been excreting virus for prolonged periods have been reported in the U.S.A., Germany and Japan. The identification of a healthy immunodeficient patient in the U.K. who has probably been excreting type 2 poliovirus for 15 years will be described, with the characteristics of the virus and the results of attempts at treatment so far. Such individuals pose a significant risk to the eradication programme unless they can be identified and treated."

#Shedding #Polio #Vaccine #Failure #Paralysis #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/11763340>

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### **Chickenpox attributable to a vaccine virus contracted from a vaccinee with zoster.**

"Five months after 2 siblings were immunized with varicella vaccine, 1 developed zoster. Two weeks later the second sibling got a mild case of chicken pox. Virus isolated from the latter was found to be vaccine type. Thus, the vaccine strain was transmitted from the vaccinee with zoster to his sibling. Vaccinees who later develop zoster must be considered contagious."

#Shedding #Chickenpox #Shingles

#Varicella #Zoster #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/10920184/>

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### **Chronic progressive poliomyelitis secondary to vaccination of an immunodeficient child.**

"We investigated an immunodeficient child in whom chronic progressive poliomyelitis developed after she had received live oral poliovirus vaccine. Poliovirus, Type II, was isolated from throat and stool during life and from several sites within the brain at autopsy."

#Polio #Vaccine #Failure #Shedding #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/195206>

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### **Clinical testing of pre-pandemic live attenuated A/H5N2 influenza candidate vaccine in adult volunteers: results from a placebo-controlled, randomized, double-blind phase 1 study.**

placebo-controlled, randomized double-blind phase I study.

#Shedding #Live #Influenza #Flu #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/26296497/>

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### 🔴 **Conjugal transfer vaccinia.**

“Two cases of conjugal contact transfer vaccinia are described. Each patient had intimate contact after their respective partners, active-duty military personnel, received the smallpox vaccination.”

#Shedding #Smallpox #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/15337993/>

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### **Contact transmission of vaccinia virus from smallpox vaccinees in the United States, 2003-2011.**

“The vaccine contains live vaccinia virus that can be transferred through physical contact.”

#Shedding #Smallpox #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/22192851/>

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### **Contact vaccinia from recently vaccinated British soldiers.**

#Shedding #Smallpox #Genital #Sexual #Transmission #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1505686/>

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### **(The military and some hospital workers still get vaccinated for this in the U.S.)**

#### **? Continuing mortality and morbidity from smallpox vaccination.**

“Three cases of cross-infection after smallpox vaccination are described, in two of which the outcome was fatal.”

#Death #Shedding #Smallpox #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/445099/>

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### **Detection of fecal shedding of rotavirus vaccine in infants following their first dose of pentavalent rotavirus vaccine.**

#Shedding #Rotavirus #Failure #Gastrointestinal #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/21477676/>

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### **Detection of measles vaccine in the throat of a vaccinated child.**

#Shedding #Measles #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/11858860/>

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### **Detection of measles virus RNA in urine specimens from vaccine recipients.**

#Shedding #Measles #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC228449/>

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### **Detection of Vaccinia DNA in the Blood Following Smallpox Vaccination**

“To the Editor: Routine administration of the smallpox vaccine ended in the United States in 1972. With the reinitiation of the US smallpox vaccination program in 2002, the risk of transmission of vaccinia virus from a recently vaccinated person to a susceptible host is a concern. Secondary transmission is biologically plausible because of evidence of viral persistence in vaccinees. Vaccinia virus has been cultured from the oropharynx of vaccine recipients with a normal course following vaccination.<sup>1</sup> In the 1960s and 1970s, it was isolated from the blood and urine of a limited number of vaccine recipients who had complications following vaccination.”

#Shedding #Smallpox #Vaccine

#MedScienceResearch

<http://jamanetwork.com/journals/jama/article-abstract/202747>

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### **Development, production, and postmarketing surveillance of hepatitis A vaccines in China.**

“Live HAV vaccine had substantial horizontal transmission due to vaccine virus shedding; thus, further monitoring of the safety of virus shedding is warranted.”

#Shedding #Hepatitis A #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/24681843/>

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### **Differentiation of RotaTeq(®) vaccine strains from wild-type strains using NSP3 gene in reverse transcription polymerase chain reaction assay.**

“However, shedding of the virus used in RotaTeq(®) has been detected in the feces of children following vaccination by the oral route, possibly affecting community immunity.”

#Shedding #Rotavirus #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/27590978/>

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### **🔴 Differentiating the wild from the attenuated during a measles outbreak.**

“In the midst of a local measles outbreak, a recently immunized child was investigated for a new-onset measles-type rash. Nucleic acid testing identified that a vaccine-type measles virus was being shed in the urine.”

#Shedding #Measles #Vaccine #Failure #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/23543773/>

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### **Eczema vaccinatum resulting from the transmission of vaccinia virus from a smallpox vaccinee: an investigation of**

### **potential fomites in the home environment.**

“On March 3, 2007, a 2-year-old boy was hospitalized with eczema vaccinatum. His two siblings, one with eczema, were subsequently removed from the home. Swabs of household items obtained on March 13th were analyzed for orthopoxvirus DNA signatures with real-time PCR. Virus culture was attempted on positive specimens. Eight of 25 household samples were positive by PCR for orthopoxvirus; of these, three yielded viable vaccinia virus in culture. Both siblings were found to have serologic evidence of orthopoxvirus exposure.”

#Shedding #Eczema #Smallpox #Dermatological #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/19027813/>

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### **Effect of immunization against rubella on lactation products. II. Maternal-neonatal interactions.**

#Breastfeeding #Shedding #Rubella #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/7077090/>

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### **Effect of prior immunity on the shedding of virulent revertant virus in feces after oral immunization with live attenuated poliovirus vaccines.**

“Groups of infants were immunized with one or two doses of orally inoculated live attenuated Sabin poliovirus vaccine (OPV group) or with one or two doses of enhanced-potency inactivated poliovirus vaccine (EIPV) administered parenterally followed by one or two doses of OPV (EIPV-OPV group). The fecal specimens from both groups were tested for poliovirus shedding 1-2 months after OPV. The virus isolates were examined for nucleic acid sequences in the 5' noncoding regions (bases 480, 481, and 472 for serotypes 1, 2, and 3, respectively) to determine whether the viruses shed represented nonattenuated revertants, attenuated parent vaccine strains (nonrevertants), or both. In the OPV group, 4 of the 6 virus isolates recovered 30-60 days after the first immunization dose and 1 of the 3 isolates obtained after the second dose were found to be nonrevertants (parent vaccine strain). In contrast, 11 of the 12 isolates in the EIPV-OPV group were of the nonvaccine revertant virus types. The frequency for reversion appeared to differ for different poliovirus serotypes. However, all revertant type 3 isolates were recovered from subjects previously immunized with EIPV.”

#Shedding #Polio #Vaccine

#MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/1647422/>

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### **Effectiveness of a commercial leptospiral vaccine on urinary shedding in naturally exposed sheep in New Zealand.**

“An effective vaccine and vaccination strategy would protect both humans and livestock.”

#Shedding #Veterinary #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/27109564/>

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### **An emergent poxvirus from humans and cattle in Rio de Janeiro State: Cantagalo virus may derive from Brazilian smallpox vaccine.**

“Together, the data suggested that CTGV may have derived from VV-IOC by persisting in an indigenous animal(s), accumulating

polymorphisms, and now emerging in cattle and milkers as CTGV. CTGV may represent the first case of long-term persistence of vaccinia in the New World.”

#Shedding #Smallpox

#Vaccine #Failure #Veterinary

#MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/11080491/>

**[An epidemic of vulvar vaccinia caused by catheterization].**

No abstract available

PMID 13144592

#Shedding #Smallpox #Genital #Transmission #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/13144592/>

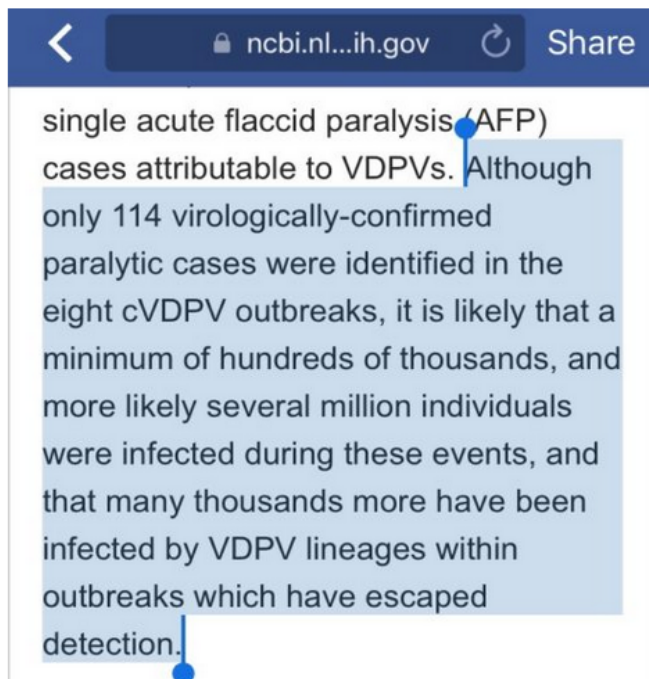
**Estimating the extent of vaccine-derived poliovirus infection.**

“Eight outbreaks of paralytic polio attributable to circulating vaccine-derived poliovirus (cVDPV) have highlighted the risks associated with oral poliovirus vaccine (OPV) use in areas of low vaccination coverage and poor hygiene.”

“Although only 114 virologically-confirmed paralytic cases were identified in the eight cVDPV outbreaks, it is likely that a minimum of hundreds of thousands, and more likely several million individuals were infected during these events, and that many thousands more have been infected by VDPV lineages within outbreaks which have escaped detection.”

#Shedding #Vaccine #Failure #Polio #Acute #Flaccid #Paralysis #Neurological #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/18958288/>



**Estimating the risk of re-emergence after stopping polio vaccination.**

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“As vaccinated hosts are natural reservoirs for virulent poliovirus, the source of the risk is the vaccination itself, employed to prevent the outbreaks.”

“Our estimates for transmission, recovery, and mutation rates, show that the probability of an outbreak of vaccine-derived virulent viruses easily exceeds 90%. Moreover, if a small fraction of hosts have a longer infectious period, as observed in individuals with innate immunodeficiency, the risk of an outbreak rises significantly.”

#Shedding #Polio #Vaccine  
#MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/22783231/>

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### **Estimation of polio infection prevalence from environmental surveillance data. 2017**

“By measuring virus shed into sewage waste in cities in which a known number of people received a live polio vaccine, the authors created tools that can be used to monitor polio incidence in other cities. Thus, virus levels in sewage waste can give an early warning of the reappearance of viral disease or verify its absence.”

“Data from the intersecting population between the two data sets (covering more than 63,000 people) yielded a dose-dependent relationship between the number of poliovirus shedders and the amount of poliovirus in sewage.

Copyright © 2017, American Association for the Advancement of Science.”

#Shedding #Polio #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/28356510/>

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### **Explosive school-based measles outbreak: intense exposure may have resulted in high risk, even among revaccinees.**

“Even high levels of measles vaccination coverage have not always prevented outbreaks of measles spread by airborne transmission. It has been suggested that a large inoculum might increase vaccine failure risk. Airborne transmission might occasionally entail a large measles inoculum. The epidemiologic relevance of measles among properly vaccinated persons (i.e., those vaccinated after 15 months of age and with live attenuated virus) is increased when they become contagious. The authors studied inoculum intensities as measured by proxy variables and the contagiousness of properly vaccinated persons who contracted measles among 51 measles patients infected in one school, at home, or elsewhere, utilizing preexisting records of measles cases and 214 healthy controls from an explosive school outbreak that occurred in a rural Finnish municipality in 1989. One “super-spreader” infected 22 others in one day, including eight once-vaccinated students and one twice-vaccinated student, probably during an assembly of 144 students in a poorly ventilated hallway with no sunlight. Those infected later at home had high measles risk, even if they were revaccinees. When siblings shared a bedroom with a measles case, a 78 percent risk (seven out of nine children) was observed among vaccinees. Vaccinees had approximately 2 days’ shorter incubation time than unvaccinated persons. Vaccinated and unvaccinated students were equally able to infect their siblings. Total protection against measles might not be achievable, even among revaccinees, when children are confronted with intense exposure to measles virus.”

#Shedding #Measles  
#Vaccine #Failure  
#MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/9850133/>

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### **Faecal shedding of canine parvovirus after modified-live vaccination in healthy adult dogs.**

"Despite individual differences, CPV DNA was detectable for up to 28 days after vaccination, although the faecal CPV DNA load in these clinically healthy dogs was very low."

#Shedding #Parvo #Dog #Animal #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/28093104/>

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### **A family outbreak of oral accidental vaccinia.**

"Accidental vaccinia may occur either in a recently vaccinated person through autoinoculation by vesicular fluid or in a person who is in close personal contact with a recently vaccinated person. Though oral lesions of accidental vaccinia are not uncommon, an outbreak of similar oral lesions in a family is unusual."

#Shedding #Smallpox #Vaccine

#MedScienceResearch

<http://jamanetwork.com/journals/jamadermatology/article-abstract/534174>

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### **Frequency of vaccinia virus isolation on semipermeable versus nonocclusive dressings covering smallpox vaccination sites in hospital personnel.**

"Compared with nonocclusive dressings, the semipermeable dressing reduced, but did not eliminate, the frequency with which vaccinia virus was cultured from the surface of the dressing."

#Shedding #Smallpox #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/15153922/>

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### **H2N2 live attenuated influenza vaccine is safe and immunogenic for healthy adult volunteers.**

"It was shed by 78.6% and 74.1% volunteers after the first and second dose, respectively, most probably due to the human origin of the virus."

#Shedding #Live #Influenza #Flu #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/25831405/>

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### **Herpes zoster due to Oka vaccine strain of varicella zoster virus in an immunosuppressed child post cord blood transplant.**

#Shingles #Shedding

#Vaccine #Failure #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/17854459>

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### **Horizontal transmission of a human rotavirus vaccine strain—a randomized, placebo-controlled study in twins.**

#Shedding #Rotavirus #Vaccine #Failure #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/22008819/>

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**[Horizontal transmission of live attenuated hepatitis A vaccine virus].**

#Shedding #Hepatitis A #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/11798919/>

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**Horizontal transmission of rhesus monkey rotavirus-based quadrivalent vaccine during a phase 3 clinical trial in Caracas, Venezuela.**

#Shedding #Rotavirus #Gastrointestinal #Vaccine #Failure #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/22749598/>

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**Horizontal transmission of the Leningrad-Zagreb mumps vaccine strain: a report of three cases.**

No abstract available

PMID 18329761

#Shedding #Mumps #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/18329761/>

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**How Contagious Is Vaccinia?**

“A report on vaccine-related deaths in the United States during the 1960s found that 12 of the 68 deaths occurred in unvaccinated persons exposed to recently vaccinated family members or friends, a finding that demonstrates the potential gravity of the problem.”

“Numerous reports have described the spread of vaccinia virus within families. The majority are instances of single transmission, usually from a recently vaccinated child to an unvaccinated younger sibling.<sup>22-25</sup> However, two or more secondary cases have been reported in at least eight reports of family outbreaks published from 1931 to 1981<sup>26-33</sup> (Table 2). Many of the reports describe severe, sometimes fatal eczema vaccinatum in the first family member with secondary disease and substantially milder local inoculation disease in the rest of the family.”

#Recently #Vaccinated #Shedding #Death #Smallpox #Eczema #Dermatological #Vaccine  
#MedScienceResearch

<http://www.nejm.org/doi/pdf/10.1056/NEJMra022500>

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#Animals #Shedding #Vaccine #MedScienceResearch

“Is human exposure to veterinary vaccines a potential public health concern? There is currently limited understanding of the incidence of exposure of individuals to veterinary vaccines or of the consequences of such exposure. In addition, the potential for exposure and for adverse consequences secondary to exposure to veterinary vaccines may be increasing. The increased

development and use of veterinary vaccines (including live vaccines), the increased aerosol administration of vaccines, and the increased proportion of individuals in the United States who are immunosuppressed and who may be exposed to these vaccines or to animals shedding the vaccine strains suggest that increased vigilance may be warranted.”

<http://m.cid.oxfordjournals.org/content/37/3/407.full>

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#### **Imported vaccine-associated paralytic poliomyelitis—United States, 2005.**

“This report describes the first known occurrence of imported VAPP in an unvaccinated U.S. adult who traveled abroad, where she likely was exposed through contact with an infant recently vaccinated with OPV. This case highlights the previously unrecognized risk for paralytic polio among unvaccinated persons exposed to OPV during travel abroad.”

[#Shedding #Polio #Paralysis #Vaccine #MedScienceResearch](#)

<https://www.ncbi.nlm.nih.gov/m/pubmed/16456525/>

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#### **Inactivated poliovirus vaccine given alone or in a sequential schedule with bivalent oral poliovirus vaccine in Chilean infants: a randomised, controlled, open-label, phase 4, non-inferiority study.**

“IPV-bOPV schedules resulted in almost a 0.3 log reduction of type 2 faecal shedding compared with the IPV-only schedule.”

[#Shedding #Polio #Vaccine #MedScienceResearch](#)

<https://www.ncbi.nlm.nih.gov/m/pubmed/26318714/>

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#### **🕒 Infant meningoencephalitis caused by yellow fever vaccine virus transmitted via breastmilk.**

“In 2009, the first case was confirmed of meningoencephalitis caused by the yellow fever vaccine virus transmitted via breastmilk. We describe a second case in which the vaccine virus was possibly the etiologic agent of meningoencephalitis.”

[#Breastfeeding #Seizures #Shedding #Neurological](#)

[#Yellow #Fever #Vaccine #MedScienceResearch](#)

<https://www.ncbi.nlm.nih.gov/m/pubmed/21461453/>

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#### **Interference of Vaccine Derived Polio Viruses with Diagnosis of Enteroviral Diseases in Neonatal Period.**

“OPV vaccinated neonates commonly pass the vaccine virus in their pharynx and stool which can be mistaken with NPEV.”

[#Shedding #Polio #Vaccine #Failure #MedScienceResearch](#)

<https://www.ncbi.nlm.nih.gov/m/pubmed/28050469>

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#### **Intrafamilial transmission of a Sabin 1-related poliovirus in Shizuoka Prefecture, Japan.**



of varicella-zoster virus. National Institute of Allergy and Infectious Diseases Varicella Vaccine Collaborative Study Group.

“To examine whether the live varicella vaccine virus is attenuated. we analyzed varicella vaccine-induced contact cases of clinical

chickenpox in healthy siblings of immunized children with leukemia. A rash developed approximately 1 month later in 156 children with leukemia who had been vaccinated. Vaccine-type virus was isolated from 25 of these children. Of 88 known susceptible healthy siblings who were exposed to a vaccine with a rash and from whom follow-up information was available, there was evidence of infection in 15 (17%). Of 15 siblings with seroconversion, 11 (73%) also acquired a mild rash with an average of 38 lesions and no accompanying systemic symptoms. Vaccine-type virus was isolated from four of the contact siblings. Tertiary transmission was documented once. Contact siblings with seroconversion were protected during future household exposure to chickenpox, which occurred in four instances.”

#Shedding #Varicella #Chickenpox #Vaccine #Failure #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/2153790/>

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#### **Long-term excretion of vaccine-derived poliovirus by a healthy child.**

“A child was found to be excreting type 1 vaccine-derived poliovirus (VDPV) with a 1.1% sequence drift from Sabin type 1 vaccine strain in the VP1 coding region 6 months after he was immunized with oral live polio vaccine.”

#Shedding #Polio #Vaccine

#MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/15564492/>

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#### **Long-term viremia and fecal shedding in pups after modified-live canine parvovirus vaccination.**

#Shedding #Parvo #Animal #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/24793948/>

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#### **🔴 [Mumps vaccine virus transmission].**

“In this work we report the mumps vaccine virus shedding based on the laboratory confirmed cases of the mumps virus (MuV) infection. The likely epidemiological sources of the transmitted mumps virus were children who were recently vaccinated with the mumps vaccine containing Leningrad-Zagreb or Leningrad-3 MuV. The etiology of the described cases of the horizontal transmission of both mumps vaccine viruses was confirmed by PCR with the sequential restriction analysis.”

#Mumps #Vaccine #Failure #Shedding #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/24772647/>

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#### **Natural human infections with Vaccinia virus during bovine vaccinia outbreaks.**

“Farmers, milkers and their close contacts developed lesions on the hands, forearms, legs and face accompanied by fever, headache, malaise, myalgia and axillary, inguinal and cervical lymphadenopathy.”

“...and 50% of smallpox-vaccinated individuals developed symptoms.”

#Shedding #Smallpox #Dermatological #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/19243990/>

wrestling with vaccinated members of his unit. This case highlights both the need to reinforce infection-control measures among vaccinees and the need for providers to be familiar with the identification and treatment of cutaneous and ocular vaccinia infection."

#Shedding #Ophthalmological #Eyes #Smallpox #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/21702392/>

#### **Oral poliovaccine: will it help eradicate polio or cause the next epidemic?**

"RESULTS: Characterization of poliovirus from sewage revealed eight type 2 and three type 3 vaccine polioviruses that had replicated and started to evolve (vaccine that replicated and diverged by 0.5 to  $\leq$  1.0%) and nine highly diverged type 2 vaccine-derived polioviruses (1-15% divergence from the respective Sabin strain) with 8-14% divergence between the years 1998 and 2005. Six of the eleven VRPV uniquely recombined with OPV and/or NPEV. The nine VDPV were epidemically related, genotypically neurovirulent, and had 10-15 amino acid substitutions in antigenic sites altering their antigenicity, but shared a single recombination. Type 2 OPV was excreted by 23% and 17% of infants challenged with OPV 3 months after partial immunization (two doses each of OPV and enhanced inactivated poliovirus) or full immunization (three doses of each) respectively, despite high humoral antibody titers. CONCLUSIONS: Our findings, which show that OPV is excreted for a significant period by children with high humoral immunity, emphasize the long-term potential threat from VDPV in highly vaccinated populations." #Shedding #Polio #Vaccine #MedScienceResearch <https://www.ncbi.nlm.nih.gov/m/pubmed/16805227/>

#### **Outbreak of poliomyelitis in Hispaniola associated with circulating type 1 vaccine-derived poliovirus.**

"An outbreak of paralytic poliomyelitis occurred in the Dominican Republic (13 confirmed cases) and Haiti (8 confirmed cases, including 2 fatal cases) during 2000-2001. All but one of the patients were either unvaccinated or incompletely vaccinated children, and cases occurred in communities with very low (7 to 40%) rates of coverage with oral poliovirus vaccine (OPV). The outbreak was associated with the circulation of a derivative of the type 1 OPV strain, probably originating from a single OPV dose given in 1998-1999. The vaccine-derived poliovirus associated with the outbreak had biological properties indistinguishable from those of wild poliovirus."

#Shedding #Death #Polio

#Recently #Vaccinated

#Vaccine #Failure #Paralysis

#MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/11896235/>

#### **[Participation of vaccinia virus in the pathogenesis of different clinical forms of postvaccinal complications. I. Frequency of vaccinia virus detection in the vaccinated who have usual and complicated reactions to vaccination].**

#Shedding #Smallpox #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/18171221/>

#### **Persistent fetal rubella vaccine virus infection following inadvertent vaccination during early pregnancy.**

"Whereas in 5 cases the vaccine virus was not transmitted vertically, in 1 case vaccination led to the development of persistent fetal infection with prolonged virus shedding for more than 8 months. Sequence analysis carried out on isolates from amniotic fluid,

from cord blood leukocytes as well as from infantile urine confirmed an infection by the vaccine strain.”

#Shedding #Pregnancy #Rubella #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/10745249/>

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**Persistent rotavirus vaccine shedding in a new case of severe combined immunodeficiency: A reason to screen.**

#Shedding #Rotavirus

#Vaccine #Failure #Gastrointestinal

#MedScienceResearch

[http://www.jacionline.org/article/S0091-6749\(09\)01565-6/abstract](http://www.jacionline.org/article/S0091-6749(09)01565-6/abstract)

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**Poliomyelitis Associated With Type 2 Virus**

**Paralytic Disease in the Father of a Recently Immunized Child**

“Paralytic poliomyelitis was diagnosed clinically in a 29-year-old man three weeks after his 2-year-old son received trivalent live oral poliovirus vaccine. Type 2 poliovirus with “vaccine-like” characteristics was isolated from the patient’s stool, and the serum showed a significant rise in neutralizing antibody against type 2 virus. There was no rise in complement fixation antibody titers. The patient’s illness was likely due to type 2 poliovirus contracted from his son. Physicians should inquire about the immunization status of parents before administering vaccine to children.”

#Recently #Vaccinated #Shedding #Polio #Paralysis #Vaccine

#MedScienceResearch

<http://jamanetwork.com/journals/jama/article-abstract/335320>

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**Poliovirus Infections in Four Unvaccinated Children — Minnesota, August–October 2005**

“On September 29, 2005, the Minnesota Department of Health (MDH) identified poliovirus type 1 in an unvaccinated, immunocompromised infant girl aged 7 months (the index patient) in an Amish community whose members predominantly were unvaccinated for polio. The patient has no paralysis; the source of the patient’s infection is unknown. Subsequently, poliovirus infections in three other children within the index patient’s community have been documented.”

“Partial sequencing of the virus capsid protein coding region (VP1) of the poliovirus genome at the MDH laboratory identified it as a vaccine-derived poliovirus (VDPV). VDPVs are poliovirus strains derived from one of the three Sabin poliovirus strains in oral polio vaccine (OPV) that have >1% difference in nucleotide sequence from the prototype vaccine virus.”

#Recently #Vaccinated #Shedding #Polio #Gastrointestinal #Vaccine #Failure #MedScienceResearch

<https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5441a6.htm>

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**Poliovirus vaccine strains in sewage and river water in South Africa.**

“However, as OPV strains are excreted in stools after vaccination, this vaccine could become a source of dissemination of PVs in the environment and the potential cause of poliomyelitis.”

“The identification of 49 viable OPV isolates confirmed the presence and circulation of PV vaccine strains in sewage and river water.”

#Shedding #Polio #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/16917529/>

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#### **Postpartum live virus vaccination: lessons from veterinary medicine.**

“Pregnant rubella-susceptible women are often revaccinated during the postpartum period with the Measles, Mumps, and Rubella vaccine (MMR). It is known that the rubella virus from vaccine is secreted in breast milk and persists in the nose and throat for up to 28 days but it is not known whether the measles and mumps viruses are similarly secreted. It is probable the measles virus from vaccine is.”

#Breastfeeding #Shedding

#Rubella #MMR

#Veterinary #Measles

#Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/12208153/>

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#### **Postpartum rubella immunization: association with development of prolonged arthritis, neurological sequelae, and chronic rubella viremia.**

#Shedding #Breastfeeding #Arthritis #Rubella #Neurological

#Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/4031558/>

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#### **Prevalence of vaccine-derived polioviruses in stools of immunodeficient children in South Africa.**

“Prolonged excretion of PVs by immunodeficient individuals is of major concern, because continued replication of PVs in the human gut could result in the reversion of these viruses to greater neurovirulence. When exposed to OPV, immunodeficient patients may become chronically infected, spreading potentially neurovirulent VDPVs for many months or years to close contacts and children who are no longer being vaccinated after termination of OPV vaccination in the near future.”

#Shedding #Polio #Vaccine

#MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/17105568/>

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#### **[Rapid identification of Beijing measles vaccine virus and wild virus by multiplex real-time fluorescent PCR].**

“Out of the 16 measles patients with vaccination history, 3 were negative and the other 13 all belonged to measles virus genotype A, and were confirmed to be vaccine virus by sequencing method.”

#Shedding #Measles #Vaccine #Failure #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/23363872/>

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#### **Reemergence of vaccinia virus during zoonotic outbreak, Pará State, Brazil**

Reemergence of vaccinia virus during bovine outbreak, Pará State, Brazil

"In 2010, vaccinia virus caused an outbreak of bovine vaccinia that affected dairy cattle and rural workers in Pará State, Brazil. Genetic analyses identified the virus as distinct from BeAn58058 vaccinia virus (identified in 1960s) and from smallpox vaccine virus strains. These findings suggest spread of autochthonous group 1 vaccinia virus in this region."

#Shedding #Smallpox  
#Vaccine #Failure #Veterinary  
#MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/24274374/>

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#### Response to smallpox vaccine in persons immunized in the distant past.

"Vaccinia-naïve participants shed virus from the vaccination site 2 to 6 days longer and had significantly higher peak mean viral titers when compared with the non-naïve participants (P =.002)."

#Shedding #Smallpox #Vaccine  
#MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/12824212/>

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#### Risk of Contact Vaccinia From Immunization Sites

"To the Editor: Dr Garde and colleagues<sup>1</sup> stated that "The mechanism of transfer from the vaccinee to the spouse is uncertain." They did not report, however, whether they asked about mouth-to-nipple contact from the vaccinee to the spouse. Oral shedding of virus could transmit the virus via direct mucosal contact."

#Shedding #Smallpox #Sexual #Transmission #Vaccine #MedScienceResearch

<http://jamanetwork.com/journals/jama/article-abstract/198749>

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#### Risk of vaccinia transfer to the hands of vaccinated persons after smallpox immunization.

"Transmission of vaccinia virus after smallpox vaccination is a concern. "

#Shedding #Smallpox #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/14765347/>

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#### Risks of reintroduction of polio after eradication: the vaccine origin of an outbreak of type 3 poliomyelitis.

"In this report, we have examined virological and epidemiological aspects of an epidemic of poliomyelitis in 1968 in Poland that was shown to be associated with the use of the USOL-D-bac live-attenuated vaccine strain. Possible causes of the origin and progress of the outbreak included the pattern of virus excretion from vaccinees, mutations identified in epidemic viruses and the unique vaccination policies in Poland during the years preceding the epidemic."

#Shedding #Polio  
#Vaccine #Failure  
#MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/14765347/>



<https://www.ncbi.nlm.nih.gov/m/pubmed/11763347/>

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**Rotavirus shedding in premature infants following first immunization.**

#Shedding #Rotavirus #Failure #Gastrointestinal #Premature #Vaccine #Premie #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/21856359/>

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**Rotavirus vaccine-derived shedding and viral reassortants.**

#Shedding #Rotavirus #Failure #Gastrointestinal #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/23249230/>

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**Rotavirus vaccines: viral shedding and risk of transmission.**

#Shedding #Rotavirus #Failure #Gastrointestinal #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/18922486/>

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**Rubella persistence in epidermal keratinocytes and granuloma M2 macrophages in patients with primary immunodeficiencies**

#Rubella #Shedding #Vaccine #MedScienceResearch

<http://www.jacionline.org/retrieve/pii/S0091674916307126>

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**Safety and immunogenicity of RV3-BB human neonatal rotavirus vaccine administered at birth or in infancy: a randomised, double-blind, placebo-controlled trial.**

“A serum IgA response was detected in 19 (63%) of 30 participants and 20 (74%) of 27 participants, and stool shedding of RV3-BB was detected in 21 (70%) of 30 participants and 21 (78%) of 27 participants in the neonatal and infant schedule groups, respectively.”

#Shedding #Rotavirus #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/26318715/>

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**Secondary and Tertiary Transfer of Vaccinia Virus Among U.S. Military Personnel — United States and Worldwide, 2002–2004**

“Case 1. In early May 2003, a service member received his primary smallpox vaccination. Approximately 6–8 days after vaccination, he experienced a major reaction (i.e., an event that indicates a successful take; is characterized by a papule, vesicle, ulcer, or crusted lesion, surrounded by an area of induration; and usually results in a scar) (4). The vaccinee reported no substantial pruritus. He slept in the same bed as his wife and kept the vaccination site covered with bandages. After bathing, he reportedly dried the vaccination site with tissue, which he discarded into a trash receptacle. He also used separate towels to dry himself, rolled them so the area that dried his arm was inside, and placed them in a laundry container. His wife handled bed linen, soiled clothing, and towels; she reported that she did not see any obvious drainage on clothing or linen and had no direct contact

with the vaccination site.

In mid-May, the wife had vesicular skin lesions on each breast near the areola but continued to breastfeed. Approximately 2 weeks later, she was examined at a local hospital, treated for mastitis, and continued to breastfeed. The same day, the infant had a vesicular lesion on the upper lip, followed by another lesion on the left cheek (5). Three days later, the infant was examined by a pediatrician, when another lesion was noted on her tongue. Because of possible early atopic dermatitis lesions on the infant's cheeks, contact vaccinia infection with increased risk for eczema vaccinatum was considered. The infant was transferred to a military referral medical center for further evaluation. On examination, the infant had seborrheic dermatitis and no ocular involvement. Skin lesion specimens from the mother and infant tested positive for vaccinia by viral culture and PCR at the Alaska Health Department Laboratory and at Madigan Army Medical Center. Because both patients were stable clinically and the lesions were healing without risk for more serious complications, vaccinia immune globulin was not administered. Neither patient had systemic complications from the infection.

Case 2. In July 2003, a service member who had been vaccinated was wrestling with an unvaccinated service member at a military recreational function when the bandages covering the vaccination site fell off. The unvaccinated service member subsequently wrestled with another unvaccinated service member. Six days later, both unvaccinated service members had lesions on their forearms, neck, and face. Skin lesion specimens from both men tested positive for vaccinia virus by PCR and viral culture at Tripler Army Medical Center's microbiology laboratory."

[#Recently #Vaccinated #Shedding #Breastfeeding #Smallpox #Dermatological #Vaccine #MedScienceResearch](#)

<https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5305a3.htm>

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### **Secondary and tertiary transmission of vaccinia virus after sexual contact with a smallpox vaccinee—San Diego, California, 2012.**

"On June 24, 2012, CDC notified Public Health Services, County of San Diego Health and Human Services Agency, of a suspected case of vaccinia virus infection transmitted by sexual contact. The case had been reported to CDC by an infectious disease specialist who had requested vaccinia immune globulin intravenous (VIGIV) (Cangene Corporation, Berwyn, Pennsylvania) for a patient with lesions suspicious for vaccinia. The patient reported two recent sexual contacts: one with a partner who recently had been vaccinated against smallpox and a later encounter with an unvaccinated partner. Infections resulting from secondary transmission of vaccinia virus from the smallpox vaccinee to the patient and subsequent tertiary transmission of the virus from the patient to the unvaccinated partner were confirmed by the County of San Diego Public Health Laboratory. The smallpox vaccine had been administered under the U.S. Department of Defense smallpox vaccination program. The vaccinee did not experience vaccine-associated complications; however, the secondary and tertiary patients were hospitalized and treated with VIGIV. No further transmission was known to have occurred. This report describes the epidemiology and clinical course of the secondary and tertiary cases and efforts to prevent further transmission to contacts."

[#Shedding #Smallpox #Genital #Sexual #Transmission #Vaccine #MedScienceResearch](#)

<https://www.ncbi.nlm.nih.gov/m/pubmed/23446513/>

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### **Secondary and tertiary transmission of vaccinia virus from US military service member. 2011.**

"During February and March 2010, the New York State Department of Health investigated secondary and tertiary vaccinia contact transmission from a military vaccinee to 4 close contacts. Identification of these cases underscores the need for strict adherence to postvaccination infection control guidance to avoid transmission of the live virus."

#Shedding #Smallpox #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/21470470/>

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**Secondary transmission of varicella vaccine virus in a chronic care facility for children.**

"A 16-year-old varicella-seronegative resident at a chronic care facility received varicella vaccine; 15 days later he developed severe varicella. Subsequently, a 13-year-old resident and a 39-year-old health care worker developed mild varicella. We demonstrate that vaccine-strain virus was transmitted to both persons, and that transmission included at least 2 variant vaccine strains."

#Shedding #Vaccine #Failure #Varicella #Chickenpox  
#MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/16769402/>

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**Serotype-specific mucosal immune response and subsequent poliovirus replication in vaccinated children.**

"In the case of poliovirus Type 3, about 10% of children were still excreting the vaccine virus 9 weeks after administering the third dose."

#Shedding #Polio #Vaccine #Failure #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/12938203/>

—

**Severe combined immunodeficiency (SCID) and rotavirus vaccination: reports to the Vaccine Adverse Events Reporting System (VAERS).**

"Stool rotavirus testing was positive in all cases and the virus was identified as the vaccine strain in six cases. Prolonged viral shedding was documented in five cases."

#Shedding #Rotavirus  
#Vaccine #Failure #Gastrointestinal  
#VAERS #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/20674876/>

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**Severe eczema vaccinatum in a household contact of a smallpox vaccinee.**

"A 28-month-old child with refractory atopic dermatitis developed eczema vaccinatum after exposure to his father, a member of the US military who had recently received smallpox vaccine. The father had a history of inactive eczema but reportedly reacted normally to the vaccine. The child's mother also developed contact vaccinia infection."

#Shedding #Eczema #Smallpox #Dermatological #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/18419490/>

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**Shedding of Ann Arbor strain live attenuated influenza vaccine virus in children 6-59 months of age.**

#Shedding #Live #Influenza #Flu #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/21513761/>

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**Shedding of virulent poliovirus revertants during immunization with oral poliovirus vaccine after prior immunization with inactivated polio vaccine.**

"Fecal shedding of virulent revertant polioviruses was examined in isolates from infants previously immunized with > or = 1 dose of orally administered live attenuated polio vaccine (OPV) alone, enhanced-potency inactivated polio vaccine (EIPV) alone, or a combination of both. After administration of OPV alone, vaccine poliovirus serotypes were recovered in feces within 1 week and for as long as 31-60 days in 30%-80% of subjects after 1 or 2 doses and in 30%-50% after immunization with > or = 3 doses. No revertant poliovirus shedding was observed after OPV challenge in subjects immunized previously with > or = 3 doses of OPV. However, fecal shedding of revertant poliovirus after OPV challenge was observed in 50%-100% of subjects previously immunized with > or = 3 doses of the EIPV. These findings suggest that prior immunization with EIPV does not prevent fecal shedding of revertant polioviruses after subsequent reexposure to OPV."

#Shedding #Polio #Vaccine

#MedScienceResearch  
<https://www.ncbi.nlm.nih.gov/m/pubmed/11808015/>

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**Smallpox vaccine, ACAM2000: Sites and duration of viral shedding and effect of povidone iodine on scarification site shedding and immune response.**

"Autoinoculations and secondary and tertiary transmissions due to VACV shedding from the vaccination site continue to occur despite education of vaccinees on the risks of such infections. The objectives of this study were to investigate, in naïve smallpox vaccinees, (a) whether the vaccination site can remain contagious after the scab separates and (b) whether the application of povidone iodine ointment (PIO) to the vaccination site inactivates VACV without affecting the immune response."

#Shedding #Smallpox #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/25930115/>

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**Society for Assisted Reproductive Technology position statement on donor suitability of recipients of smallpox vaccine (vaccinia virus).**

#Shedding #Smallpox #Genital #Transmission #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/17055849/>

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**[Spinal poliomyelitis due to contact with polio vaccine virus].**

"Poliomyelitis with permanent paralysis of both legs developed in a 48-year-old woman previously not immunized against polio. The probable cause was the virus (probably Type II) contained in Sabin's live virus vaccine, transmitted by contact with a grandchild who had been immunized with the oral vaccine."

#Shedding #Polio #Paralysis

#Unvaccinated #Vaccine #MedScienceResearch

<https://www.thieme-connect.com/products/ejournals/abstract/10.1055/s-0028-1110180?device=mobile&innerWidth=980&>

offsetWidth=980

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**Spotlight on measles 2010: excretion of vaccine strain measles virus in urine and pharyngeal secretions of a child with vaccine associated febrile rash illness, Croatia, March 2010.**

#Measles #Shedding #Vaccine #MedScienceResearch

<http://www.ncbi.nlm.nih.gov/m/pubmed/20822734/>

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**🕒 Spread of vaccinia virus through shaving during military training, Joint Base San Antonio-Lackland, TX, June 2014.**

“Adverse events following smallpox vaccination may occur in the vaccinee, in individuals who have contact with the vaccinee (i.e., secondary transmission), or in individuals who have contact with the vaccinee’s contact (i.e., tertiary transmission). In June 2014 at Joint Base San Antonio-Lackland, TX, two cases of inadvertent inoculation of vaccinia and one case of a non-viral reaction following vaccination occurred in the security forces training squadron. This includes the first reported case of shaving as the likely source of autoinoculation after contact transmission. This paper describes the diagnosis and treatment of these cases, the outbreak investigation, and steps taken to prevent future transmission.”

#Shedding #Smallpox #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/25162496/>

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**ST-246 inhibits in vivo poxvirus dissemination, virus shedding, and systemic disease manifestation.**

“Here, we show that ST-246 treatment not only results in the significant inhibition of vaccinia virus dissemination from the site of inoculation to distal organs, such as the spleen and liver, but also reduces the viral load in organs targeted by the dissemination. In mice intranasally infected with vaccinia virus, virus shedding from the nasal and lung mucosa was significantly lower (approximately 22- and 528-fold, respectively) upon ST-246 treatment.”

“Second, by reducing virus shedding from those prophylactically immunized with a smallpox vaccine or harboring variola virus infection, ST-246 could reduce the risk of virus transmission to susceptible contacts.”

#Shedding #Smallpox #Vaccine

#MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/19752270/>

—  
**State of the art: Could nursing mothers be vaccinated with attenuated live virus vaccine?**



“Three cases of vaccine-associated paralytic poliomyelitis (two contacts and one recipient) occurred in the Bourgas region of Bulgaria in the spring of 2006. The first two cases, notified as acute flaccid paralysis, were 55 days old unvaccinated twin brothers, having been in contact with vaccinees. The third case concerned a 4-month-old infant who had received the first OPV dose 37 days prior to the onset of illness.”

#Recently #Vaccinated #Shedding #Polio #Acute #Flaccid #Paralysis #Neurological #Vaccine #Failure

#MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/19626606/>

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**Transmission of the L-Zagreb mumps vaccine virus, Croatia, 2005-2008.**

"We report on three cases of symptomatic transmission of the L-Zagreb mumps vaccine virus from three vaccinated children to five adult contacts. The five contact cases were parents of the vaccinated children and presented with parotitis and in one case also with aseptic meningitis. The etiology of the contacts' illness was determined by viral culture, genomic sequencing, serology and epidemiological linking. Two of the vaccinated children developed vaccine associated parotitis as an adverse event three weeks following immunization."

#Shedding #Mumps #Meningitis

#Vaccine #Failure #MMR

#MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/18768116/>

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**Transmission of Urabe mumps vaccine between siblings.**

No abstract available

collected from diseased cows demonstrated the presence of HAI antibodies and made evident their kinetics at a 2-week-interval."

#Shedding #Smallpox #Veterinary #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/1034363/>

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**Transmission of vaccinia virus, possibly through sexual contact, to a woman at high risk for adverse complications.**



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**Unintentional transfer of vaccinia virus associated with smallpox vaccines: ACAM2000(®) compared with Dryvax(®).**

"We identified 309 reports for ACAM2000® with skin or ocular involvement, of which 93 were autoinoculation cases and 20 were contact transmission cases. The rate for reported cases of autoinoculation was 20.6 per 100,000 vaccinations and for contact transmission was 4.4 per 100,000 vaccinations. Eighteen contact transmission cases could be attributed to contact during a sporting activity (45%) or intimate contact (45%). Of the 113 unintentional transfer cases, 6 met the case definition for ocular vaccinia. The most common locations for all autoinoculation and contact cases were arm/elbow/shoulder (35/113; 31%) and face (24/113; 21%). Methods We reviewed 753 reports associated with smallpox in the Vaccine Adverse Event Reporting System and CDC Poxvirus consultation log, reported from March 2008 to August 2010. Reports were classified into categories based upon standard case definitions."

#Shedding #Smallpox #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/23571177/>

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**Transmission of yellow fever vaccine virus through breast-feeding – Brazil, 2009.**

#Breastfeeding #Shedding #Coincidence #Yellow #Fever #Vaccine #MedScienceResearch

#Breastfeeding #Shedding #Seizures #Tetlow #Fever #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/20150888/>

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recently vaccinated children with trivalent live oral polio vaccine is described. Symmetrical lower motor neuron involvement of deltoid muscles with electromyographic confirmation was found. Upper motor neuron signs, with symmetrical hyperactive deep tendon reflexes developed in the lower extremities. Poliovirus Type-2 vaccine-like strain was cultured from one patient and both patients showed significant antibody titers rises to poliovirus. Attention is drawn to the possible clinical differences between vaccine associated poliomyelitis and the usual features found in wild strain poliomyelitis. It is suggested that in selected cases, non-immunized contacts be given inactivated polio-vaccine when the vaccinees are immunized with the live oral-vaccine.”

#Shedding #Recently #Vaccinated #Paralysis #Polio #Encephalitis  
#Neurological #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/3687370/>

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### ● **Vaccine-associated paralytic poliomyelitis: a case report of domiciliary transmission.**

“We herein present the case of an unvaccinated child, with a clinical picture of an acute anterior poliomyelitis associated with the live strain vaccine, whose brother received the Sabin vaccine 20 days before the onset of the symptoms. Vaccine strain of the type 3 poliovirus was isolated in fecal culture and a presented mutation in nucleotide 472 (C→U) in the 5’ non-coding region, which is strongly related to the higher strain virulence.”

#Shedding #Polio #Paralysis  
#Recently #Vaccinated  
#Neurological #Unvaccinated  
#Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/10983013/>

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### **Vaccine-associated paralytic poliomyelitis caused by contact infection.**

“We encountered an adult patient with acute anterior poliomyelitis (AAP), whose monoparesis developed 28 days after his son’s immunization with oral poliovirus vaccine (OPV). Neurological and electrophysiological examinations suggested that his muscular wasting of the left lower limb was due to a lower motor neuron disorder, and magnetic resonance imaging revealed the responsible lesion in the left anterior horn at the thoracolumbar junction. His stool was found to include poliovirus type 3, mainly originating from Sabin 3 by neutralization antibody and PCR-restriction fragment length polymorphism method. This indicated that the AAP resulted from contact with his son.”

#Shedding #Polio #Paralysis  
#Recently #Vaccinated  
#Neurological #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/16617188/>

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### **VACCINE-ASSOCIATED POLIOMYELITIS IN A CHILD WITH THYMIC ABNORMALITY**

#Polio #Shedding #Death #Paralysis #Vaccine #Failure #MedScienceResearch

<http://pediatrics.aappublications.org/content/48/6/923>

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### Vaccine-associated poliomyelitis in an infant with agammaglobulinemia.

#Polio #Vaccine #Failure #Shedding #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/6255734>

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<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1045005/>

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### Vaccinia Virus in Household Environment during Bovine Vaccinia Outbreak, Brazil

“Human-to-human transmission has been suggested to have occurred in some bovine vaccinia outbreaks in Brazil, and nosocomial infection has been reported Asia (2,8). Household transmission of VACV has also been described in the United States after contact with lesions of a smallpox vaccinee in the military (9)”

#Shedding #Smallpox #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3840863/>

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### Vaccinia keratouveitis manifesting as a masquerade syndrome.

“A patient with no reported contact lenses and no history of HIV infection developed unilateral vaccinia keratouveitis after accidental ocular vaccination are described. In postvaccinal encephalitis, vaccinia virus was isolated from blood, cerebrospinal fluid and pharyngeal secretions of 23 out of 40 children (57.5%) as well as from autopsy specimens sampled between 10-35 days after vaccination. During the acute period of disease, virus was detected in 17 out of 31 (54.2%) cerebrospinal fluid specimens. In 3 postvaccinal encephalitis cases the virus was present in brain and in a case of encephalomyelitis—in the spinal cord. These results confirmed the participation of vaccinia virus in the pathogenesis of postvaccinal encephalitis. The pathogenicity of vaccinia virus may be manifested only under a changed reactivity of the vaccinated host.”

#Death #Shedding #Encephalitis

#Neurological #Smallpox

#Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/6135334/>

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### Vaccinia virus infection after sexual contact with a military smallpox vaccinee -Washington, 2010.

“On March 1, 2010, the Washington State Department of Health (WADOH) notified Public Health – Seattle & King County (PHSKC) of a suspected case of contact transmission of vaccinia virus from sexual contact with a member of the military who had been vaccinated against smallpox. Vaccinia virus infection after sexual contact has been reported previously (1-4). Despite the patient’s exposure history and clinical presentation, the diagnosis initially was not considered by the patient’s physician, who ordered laboratory testing for several common sexually transmitted infections. The patient was seen by a second physician and referred to



an infectious disease specialist, who obtained a swab sample of a genital lesion for laboratory testing for vaccinia virus. Vaccinia virus was confirmed by the Washington State Public Health Laboratory (WAPHL) and the CDC Poxvirus Laboratory. The patient resided in a household with an immunosuppressed renal transplant recipient. Appropriate contact precautions were recommended to the patient. No additional cases of contact transmission were reported. This report describes the patient's clinical course and the associated epidemiologic investigation. Health-care providers caring for U.S. military personnel or their contacts should consider vaccinia virus infection in the differential diagnosis of clinically compatible genital lesions. Contact precautions should be emphasized to all persons who are vaccinated, as well as their contacts with unexplained lesions that might represent vaccinia infection from contact transmission."

#Shedding #Smallpox #Genital #Sexual #Transmission #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/20592687/>

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**[Vaccinia virus infection with eyelid and vulvar localization appearing after indirect contact with a recently vaccinated subject. Clinical and virological study].**

No abstract available

PMID 4097683

#Shedding #Smallpox #Genital #Transmission #Eyes #Ophthalmological #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/4097683/>

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**Vaccinia virus infections in martial arts gym, Maryland, USA, 2008.**

"Vaccinia virus is an orthopoxvirus used in the live vaccine against smallpox. Vaccinia virus infections can be transmissible and can cause severe complications in those with weakened immune systems. We report on a cluster of 4 cases of vaccinia virus infection in Maryland, USA, likely acquired at a martial arts gym."

#Shedding #Smallpox #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/21470473/>

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**Varicella vaccination after fingolimod: A case report.**

#Shedding #Varicella #Chickenpox #Shingles #Vaccine #Failure #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/25877852/>

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**Varicella Zoster Virus DNA at Inoculation Sites and in Saliva After Zostavax Immunization**

#Shingles #Shedding #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3096786/>

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**Viremia, virus excretion, and antibody responses after challenge in volunteers with low levels of antibody to rubella virus.**

#Shedding #Rubella #Vaccine #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/6255309/>

<https://www.ncbi.nlm.nih.gov/pubmed/5518030/>

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**[Virus diseases of the external female genitals. 3. Inoculation vaccinia (localized accidental vaccinias, vaccinia vulvitis)].**

No abstract available

PMID 5518030

[#Shedding #Smallpox #Genital #Transmission #Vaccine #MedScienceResearch](#)

<https://www.ncbi.nlm.nih.gov/pubmed/5518030/>

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**Vulval vaccinia.**

No abstract available

PMID 4821486

[#Shedding #Smallpox #Genital #Transmission #Vaccine #MedScienceResearch](#)

<https://www.ncbi.nlm.nih.gov/pubmed/4821486/>

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**Vulvar vaccinia infection after sexual contact with a military smallpox vaccinee—Alaska, 2006.**

“On October 10, 2006, an otherwise healthy woman visited a public health clinic in Alaska after vaginal tears that she had first experienced 10 days before became increasingly painful. The patient reported having a new male sex partner during September 22–October 1, 2006. A viral swab specimen from a labial lesion of the woman was submitted to the Alaska State Virology Laboratory (ASVL) for viral culture. The viral isolate could not be identified initially and subsequently was sent to CDC on January 9, 2007, where the isolate was identified as a vaccine-strain vaccinia virus. After vaccinia was identified, investigators interviewed the woman more closely and learned that her new sex partner was a male U.S. military service member stationed at a local military base. Further investigation determined that the service member had been vaccinated for smallpox 3 days before beginning his relationship with the woman. This report describes the clinical evaluation of the woman and laboratory testing performed to identify the isolate. Health-care providers should be aware of the possibility of vaccinia infection in persons with clinically compatible genital lesions who have had recent contact with smallpox vaccinees.”

[#Shedding #Smallpox #Genital #Sexual #Transmission #Vaccine #MedScienceResearch](#)

<https://www.ncbi.nlm.nih.gov/pubmed/17476203/>

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**Vulvar vaccinia infection after sexual contact with a smallpox vaccinee.**

“The United States ceased generalized smallpox vaccination in 1972 but reinstated it in 2002 for military personnel and selected healthcare workers (first responders who may be investigating possible cases of smallpox or caring for patients in selected hospitals) after the 2001 bioterrorism attacks. Since reinstatement of the vaccine, reports of transmission of vaccinia virus through contact with military smallpox vaccinees have been published, including four cases of female genital infection. We report a subsequent case of vulvar vaccinia infection acquired during sexual contact with a military vaccinee.”

[#Shedding #Smallpox #Genital #Sexual #Transmission #Vaccine #MedScienceResearch](#)

<https://www.ncbi.nlm.nih.gov/pubmed/19365178/>

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### What is the cause of a rash after measles-mumps-rubella vaccination?

"We describe a 17-month-old child with fever and rash after measles-mumps-rubella vaccination. Detection of vaccine-strain measles virus in his urine by polymerase chain reaction confirmed the diagnosis of a vaccine reaction rather than wild-type measles. We propose that measles virus should be sought and identified as vaccine or wild-type virus when the relationship between vaccination and measles-like illness is uncertain."

#Vaccine #Failure #Shedding #MMR #Measles #MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/10494235>

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### Widespread eczema vaccinatum acquired by contacts. A report of an autopsy case

"A 4-month-old male infant predisposed to allergic dermatitis acquired wide-spread eczema vaccinatum by contacts with a recently vaccinated sibling. He died of acute purulent peritonitis following a perforation of multiple duodenal ulcers. Fluorescence immunocytochemical and electron microscopic studies on the skin lesions revealed the presence of viral antigens and numerous virus particles compatible morphologically with those of the mature form from the same batch of smallpox vaccine given to the sibling. A large number of virus particles in the developmental form were also predominantly scattered in the cytoplasm of cells at the stratum malpighii of the epidermis as well as in neutrophils and macrophages in the skin lesions. The virus isolation from the skin lesions was done by using the HeLa cells and the human embryonic lung fibroblasts. No abnormal laboratory data were noted in immunoglobulins. On the basis of atrophy of the thymus and other lymphatic tissues and an appearance of large pyroninophilic cells in association with blastoid transformation, the authors discussed a possible participation of the disturbance of cellular immunity secondary to the virus infection in the development of the disease."

#Death #Shedding #Smallpox #Eczema #Vaccine #Dermatological  
#MedScienceResearch

<https://www.ncbi.nlm.nih.gov/m/pubmed/377910/>

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