

# [Good essay on hepatitis b immunization in newborns](https://assignbuster.com/good-essay-on-hepatitis-b-immunization-in-newborns/)

[Law](https://assignbuster.com/essay-subjects/law/), [Security](https://assignbuster.com/essay-subjects/law/security/)

\n[toc title="Table of Contents"]\n

\n \t

1. [Cover letter](#cover-letter) \n \t
2. [February 2nd 2014](#february-2nd-2014) \n \t
3. [Introduction](#introduction) \n \t
4. [Helpful phrases](#helpful-phrases) \n \t
5. [Body](#body) \n \t
6. [Conclusion](#conclusion) \n \t
7. [References](#references) \n

\n[/toc]\n \n

## Cover letter

[insert your details]
[insert your details]
[insert the recepient’s details]
[insert the recepient’s details]

## February 2nd 2014

I am pleased to submit my manuscript entitled “ Hepatitis B immunization in newborns.” Myname is [Fill in your name ]. I am submitting this manuscript for review
This paper is on the safety of vaccines used in Hepatitis B imunization. Several vaccines have been found to contain substances that once in the system of the infants may cause diseases such as lymphoblastic leukemia. This paper focuses on critiquing a journal article by Francois et al (2005): Vaccine Safety Controversies and the Future of Vaccination Programs. The paper presents the fallacies as well as the salient truths present in this article.
I believe that this manuscript contributes to the area of immunology by emphasizing the need for further research on the negative effects of thimeral preservatives and aluminum compounds in vaccines. This is important because, despite the obvious importance, there is a shortage of research on this subject.
I wish to thank you for taking time to read my manuscript.
Sincerely,
Despite the claims made by Francois et al (2005) regarding the potential risks associated with the use of thimeral in Hepatitis B vaccines in children. The authors tend to show how thimeral does not affect infants negatively because it is used in small quantities. Despite this disagreement, I agree with most of what is written in the journal article by Francois et al (2005). For example, their claim that it is difficult for researchers to make a conclusion on whether certain Hepatitis vaccines for children should be blacklisted is true. This is because despite several claims that some of these vaccines lead to other ailments and conditions, their work cannot be substituted quickly. As a reader, I can identify with the situation that the researchers in this article find themselves in. This is because while looking to conduct research that makes vaccines for children safe, they are cautious about creating controversy on vaccines that protect children from life-threatening diseases such as Hepatitis, measles and mumps. This paper seeks to outline some of the troubling factors in Francois et al (2005) article and their conclusion.

## Introduction

Francois et al (2005) article examines the various researches done relating to the safety of vaccines. They achieve this by looking at the safety concerns raised regarding major vaccines such as Hepatitis B, measles and mumps. They assert that the fears raised regarding these vaccines are not enough to trigger any major action in regulating the use of these vaccines. This may be true because the usefulness of Hepatitis B vaccines may outweigh any minor diseases and conditions associated with its use. These researchers, in making their conclusions, may have been guided by the fact that few “ safer” substitutions exist for these drugs. However, in doing so, they fail to stress the importance of examining the effects of the thimeral preservative used in vaccines. They have generalized the issue by stating that only one out of the five researches done on this subject indicate an association between thimeral and lymphoblastic leukemia. I do not agree with their claim that the chances of lymphoblastic leukemia are not increased by presence of thimeral in vaccines. This is because it is very difficult to spot such an association in prelincensure studies.

## Helpful phrases

Francois et al (2005) are not convincing because the researchers already claim that one out of the five researches done on the subject supported the fact that there is increased risk of lymphoblastic leukemia associated with administration of Hepatitis B vaccine. This is totally ignored. The methodology employed for this research is mainly based on secondary research. As such, it is only the authors’ interpretation of key research. The interpretations made are relatively sound and their claims are supported by the sources used. However, I do not agree with some of the arguments made before arriving at these conclusions.

## Body

There are a number of reasons why the research by Francois et al (2005) fails. First, mostly pre-licensure studies are used. According to Lieu, Kulldorff and Davis (2007), rare but serious effects which may be associated with vaccines are usually very difficult to spot in pre-licensure studies. Children require monitoring after the given agent has been introduced. Sequential testing methods must be done detect safety problems associated with the components present in the drug or vaccine. Extensive research has to be done to ensure that scientists come up with other agents that may replace thimeral and other controversial agents used in vaccines such as aluminum (which is associated with macrophagic myofasciitis and other general systemic complaints).
Secondly, as Barrett (2005) indicates, some children receive more than the stipulated amount of Thimeral according to the Environmental Protection Agency. This is not addressed in the article. He states that children who are vaccinated against hepatitis B may receive ethylmercury, which has often been used interchangeably with ethylmercury although the two compounds are quite different. These compounds do not share the same toxikinetic profiles.
Thirdly, the high number of routine vaccinations received by children in the United States may also contribute to concentrations of thimeral in infants. This claim is evidenced particularly because there is a rise in cases of autism associated with thimeral ethylmercury (King, 2013).
Fourth, there are wrong assumptions made by Francois et al (2005) in their article because for infants of very low weight, the thimeral preservative may cause negative effects which are associated with lymphoblastic leukemia. While this may not be spotted in children of normal weight, in underweight children, the effects of thimeral may be more pronounced (CDC, 2007).
Despite these factors pointing to disagreements with certain claims made in Francois et al (2005), there are some well-articulated and supported arguments. One of these is that the fact that there is limited information on the negative effects of thimeral, aluminum and other agents used in vaccines limits any action against the continued use of vaccines containing them.

## Conclusion

The Hepatitis B vaccine contains thimeral which has been associated with lymphoblastic leukemia. Francois et al (2005) sum up different researches done on the negative effects of various compounds used in vaccines, particularly in causing diseases such as lymphoblastic leukemia. While I agree on the need for further research, I disagree with the claim that thimeral does not have any observable contribution to the emergence of lymphoblastic leukemia in infants after Hepatitis B vaccinations.

## References

Barrett, J. R. (2005). Thimerosal and Animal Brains: New Data for Assessing Human Ethylmercury Risk. Environ Health Perspect, 113(8), A543–A544. .
CDC. (2011, February 8). Centers for Disease Control and Prevention. Centers for Disease Control and Prevention. Retrieved February 21, 2014, from http://www. cdc. gov/vaccinesafety/Vaccines/multiplesclerosis\_and\_hep\_b. html
Francois, G., Badur, S., Emirolu, N., Lambert, P., Meheus, A., Siegrist, C., et al. (2005). Vaccine Safety Controversies and the Future of Vaccination Programs. The Pediatric Infectious Disease Journal, 24(11), 953-961.
King, P. G. (2013). A Formal Response to the Answers in ‘ Expert Q&A: Childhood Vaccine Safety’”. Facility Automation Management Engineering Systems, 1(3), 1-20.
Lieu, T. A., Kulldorff, M., Davis, R. L., Lewis, E. M., Weintraub, E., Yih, K., et al. (2007). Real-Time Vaccine Safety Surveillance for the Early Detection of Adverse Events. Medical Care, 45(Suppl 2), S89-S95.