Tutorial

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Suggested Citation

Stout, F. W., & Fast, T. B. (1984). The Hepatitis B Vaccine: Responsibilities of the dentist - employer. *International Journal of Orofacial Myology*, 10(2), 5-9.

DOI: <https://doi.org/10.52010/ijom.1984.10.2.2>

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The Hepatitis B Vaccine: Responsibilities of the Dentist - Employer

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The evidence is overwhelmingly clear that members of the dental health care team constitute one of the highest risk groups for contracting a Hepatitis B infection.^{1,2} The sequelae and long-term morbidity of this disease has been well documented in recent dental literature.³ Vaccination with the Hepatitis B vaccine has been recommended for all high risk groups by the American Dental Association (A.D.A.)⁴, Center for Disease Control (C.D.C.) of the United States Public Health Service,⁵ as well as state labor commissions and health departments, i.e., North Carolina and Texas.

Although we are aware of no litigation to date, it is possible that in the future an employee who contracts Hepatitis B during the course of employment may have recourse against the employer, if that employer had not advised the employee of the risk and proper precautions (i.e., vaccine). Certainly the dental employer feels an even more important moral responsibility to

his/her employees. Although employees cannot be forced to take the vaccine, the use of forms, (Figs. 1-3), would be helpful to document that the employee had been advised of the risk, and appraised of the vaccine's availability. The choice of compliance is then up to the employee, and the documentation decreases the probability of successful legal recourse by the employee, should he or she later become infected.

It is recommended that all at risk employees be provided an information sheet on Hepatitis B and the vaccine (Fig. 1) and be provided the opportunity to ask questions in order to assure understanding of the disease, their risk for contracting the disease and the efficacy and side effects of the vaccine. The employee should then be asked to sign one of the forms indicating the desire to be vaccinated (Fig. 2), or not (Fig. 3). This information should then be filed with the employee's personnel records.

If the employee is suspected of having had Hepatitis B or had in the past, worked or lived in a high risk area, it would be wise to have an Anti-HB_s titer run before scheduling the vaccination.

Approximately six months after the last injection of the vaccine, the employee should be checked to assure that antibodies have formed and immunity is present.

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FIGURE 1

Information About Hepatitis B and the Vaccine (For Employees)

THE DISEASE

Hepatitis B is a viral infection caused by the Hepatitis B Virus (HBV). Approximately half of the victims have no signs and symptoms, thus are unaware that they have had the disease. While most people with Hepatitis B recover completely, 5-10% become chronic carriers of the virus. These carriers usually have no symptoms, but they can continue to transmit the disease to others without knowing it. Some Hepatitis B patients develop the chronic active form and may eventually suffer from liver cirrhosis. The Hepatitis B Virus also appears to be a causative factor in the development of liver cancer. Thus immunization can prevent all these sequelae.

THE VACCINE

The Hepatitis B vaccine is produced from the plasma of chronic Hepatitis B carriers. The vaccine consists of a highly purified, formalin-inactivated hepatitis B antigen (viral coating material only - not the whole virus). There is no evidence that the vaccine has ever caused Hepatitis B. It has been extensively tested for safety in chimpanzees and for safety and efficacy in large scale clinical trials with human subjects. A high percentage (85-96%) of healthy individuals who receive two doses of vaccine and an additional booster, achieve high levels of surface antibody (anti-HB_s) and protection against Hepatitis B. Persons with immune-system abnormalities, such as transplant patients, have a lessened response to the vaccine, but over half of those still develop antibodies. Full immunization requires 3 doses of vaccine over a six month period. The duration of immunity is unknown at this time, but it appears to be at least 5 years for most people.

POSSIBLE VACCINE SIDE EFFECTS

The incidence of side effects is low. No serious side effects have been reported with the vaccine. A few persons experience tenderness and redness at the site of the injection. Low grade fever may occur. Rash, nausea, joint pain, and mild fatigue have also been reported. The possibility exists that more serious side effects may be identified with more extensive use, but with over 1,000,000 doses delivered, these side effects still remain the most prominent.

If you have any questions about Hepatitis B or the Hepatitis B vaccine, please consult the package insert and please do not be afraid to ask.

FIGURE 2

Date _____

OFFICE _____

I have been advised by _____ that I am an "at-risk" employee, subject to occupational exposure to Hepatitis B. In addition, I have been advised of the possible effects of this disease by my employer, read the literature provided (attached), and discussed all questions to my satisfaction. I understand that the Hepatitis B vaccine has been reported to be 85-96% effective in providing protection from Hepatitis B, when the three-dose series has been administered, as recommended.

I further understand that, in addition to acute illness, Hepatitis B virus infection can lead to a chronic carrier state, chronic Hepatitis, Cirrhosis, and is associated with a higher risk of Liver Cancer. In addition, I understand that there is no effective treatment or cure for Hepatitis B.

I understand the risks of Hepatitis B, and of the Hepatitis B vaccine. I have read the attached literature, discussed the matter with my employer and I WOULD LIKE TO RECEIVE the vaccine. I understand that the three-dose series does not guarantee my immunity from disease, and although they are rare, I recognize that side effects of the vaccine are possible.

(signature of employee)

Date _____

(signature of guardian, if employee
is under the age of 18 years)

Date _____

(signature of employer) (company or corporation)

Date _____

(signature of witness)

Date _____

FIGURE 3

Date _____

OFFICE _____

I have been advised by _____ that I am an "at-risk" employee, subject to occupational exposure to Hepatitis B. In addition, I have been advised of the possible effects of this disease by my employer, read the literature provided (attached), and discussed all questions to my satisfaction. I understand that the Hepatitis B vaccine has been reported to be 85-96% effective in providing protection from Hepatitis B, when the three-dose series has been administered, as recommended.

I further understand that, in addition to acute illness, Hepatitis B virus infection can lead to a chronic carrier state, chronic Hepatitis, Cirrhosis, and is associated with a higher risk of Liver Cancer. In addition, I understand that there is no effective treatment or cure for Hepatitis B.

I understand the risks of Hepatitis B, and of the Hepatitis B vaccine. I have read the attached literature, discussed the matter with my employer and I elect NOT to receive the vaccine and, therefore, release my Employer his Agents and Assigns from any and all responsibility, except for accrued sick leave, insurance benefit, or other benefit that has accrued to me should I develop Hepatitis B, or any of its sequelae.

(signature of employee)

Date _____

(signature of guardian, if employee
is under the age of 18 years)

Date _____

(signature of employer) (company or corporation)

Date _____

(signature of witness)

Date _____

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The Authors wish to thank William Hahn Esq. of Shear, Newman & Hahn, P.A. for his legal opinion and review of this manuscript.