

## Chiropractic Perspectives on Bloodborne Pathogens

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In the summer of 1993, a survey was sent to a one percent random sample of chiropractors on Dynamic Chiropractic's mailing list. The purpose of the survey was to collect data about chiropractors' beliefs and practices regarding bloodborne pathogens, like HIV and hepatitis B, which have been transmitted to health care workers in the workplace. It is anticipated that this information can be used to direct educational efforts for chiropractors to prevent occupational transmission of bloodborne pathogens.

The results of the survey were presented at the 121st Annual Meeting of the American Public Health Association in October 1993 in San Francisco. The principals were Elizabeth Olsen, BSN, DC, Mitchell Haas, MA, DC, and Fred Colley, MPH, PhD. Dialogue which began at that meeting has led to interest in follow-up activities by the American Chiropractic Association's Committee on Public Health. We hope other organizations will join the effort and work toward helping chiropractors address these issues in their offices. A summary of some of the 1993 survey's results follows.

One hundred and fifty-eight DCs completed anonymous surveys were returned which gave a response rate of 33%. This response rate, although low, is consistent with previous findings for mailed questionnaires to physicians.<sup>1,2</sup> Chiropractors were asked to use an ordinal scale to register their agreement or disagreement with statements about bloodborne pathogens. The chiropractors were also asked questions about specific practice activities.

Eighty one percent (81.4%) of the chiropractors responding expressed some agreement with the statement that "The causative agent of AIDS is a retrovirus, the human immunodeficiency virus (HIV)." (12.2% were unsure and 6.4% disagreed). The majority of respondents agreed with public health officials regarding the etiology of AIDS.<sup>3,4</sup>

Fifty five percent (55.3%) agreed with public health authorities<sup>5</sup> by disagreeing with the statement, "HIV is much more infectious than hepatitis B virus." (23.7% were unsure and 21% agreed with the statement.)

Ninety-seven percent of the chiropractors agreed that HIV can be transmitted by needlestick accidents. Eighty two percent thought blood splashes to the eyes or mouth could transmit HIV. These opinions are consistent with the Centers for Disease Control findings.<sup>6,7,8</sup> However, some chiropractors disagreed with epidemiologists<sup>9</sup> by also associating transmission with insect bites (23%), coughing/sneezing (16%), and food preparation (19%).

Sixty-nine percent of the respondents thought "Health care workers stuck with a needle that is

contaminated with HIV-infected blood are likely to become infected themselves." (19% were unsure and 11% disagreed with this statement.) Multiple studies have documented the risk of HIV transmission in such accidents to be less than 0.5%.<sup>8</sup>

Forty-nine percent disagreed with the statement, "Many more health care workers die from occupationally acquired HIV than hepatitis B." (35% were unsure and 16% agreed with this false statement.) Over 200 health care workers have been dying yearly of hepatitis B contracted from workplace exposure incidents.<sup>10</sup> There have been only 39 documented cases of occupational transmission of HIV.<sup>11</sup>

Forty-seven percent of the chiropractors agreed with the statement, "Persons at risk of exposure to hepatitis B should be vaccinated to prevent hepatitis B infection." (25% were unsure and 27% disagreed.) The Occupational Health and Safety Administration, under the federal Department of Labor, has authority in this area. It mandates that all employers who have employees whose duties could reasonably anticipate exposure to bloodborne pathogens must offer, and pay for, hepatitis B vaccination. Employees have the option to decline the vaccination.<sup>12,13</sup>

In the survey, 14% (n=21) of the chiropractor respondents noted that they had employees (DCs or non-DCs) whose duties could potentially expose them to blood. Of these chiropractor employers, 55% had latex or vinyl gloves available in their offices. Fifty-seven percent (57%) had instructed their staff how to manage incidents in which they could be potentially exposed to blood. Forty-eight percent had a written plan on how to prevent exposure to bloodborne pathogens in the office.

Clearly there was a wide range of opinion regarding bloodborne pathogens among the chiropractors responding in this survey. There is some question how representative this small sample is of the entire profession. Generally, younger doctors are more likely to respond to surveys than older ones and subject interest plays a significant role in response rates.<sup>1,2</sup>

The scope of chiropractic practice in most settings does not expose DCs or their employees to blood to the same extent as the health care professionals who perform more invasive procedures. However, some of our colleagues do perform procedures that could put them at risk of accidents. Twelve percent of survey respondents perform venipuncture and 14% practice acupuncture.

The OSHA Bloodborne Pathogens Standard<sup>12</sup> was developed in response to pressure from groups interested in preventing occupationally acquired infections. Chiropractors have an ethical, not to mention legal, obligation to take responsibility for creating a safe work environment. The OSHA Standard's key provisions are summarized below.

#### Key Provisions of the OSHA Bloodborne Pathogens Standard

**Written Exposure Control Plan** This site-specific plan identifies tasks and procedures where occupational exposure to blood occurs and then outlines strategies to protect workers.

**Information and Training** Employee training on measures to prevent exposure to bloodborne pathogens is mandated upon initial assignment of duties and then, annually thereafter.

**Recordkeeping and Training** Confidential medical records on each employee with occupational

exposure to blood includes their Hepatitis B vaccination status. A signed declination for vaccination, if the employee chooses not to be vaccinated, is kept in this file. Medical records of the evaluation that follows exposures incidents (e.g., needlestick accidents) must also be maintained in this record by the employer.

**Methods of Compliance** Examples of compliance methods include universal precautions (policies that treat ALL blood and "at risk" body fluids AS IF INFECTED). Engineering controls include puncture resistant containers for used needles. Work practice controls stress handwashing and the appropriate use of personal protective equipment (PPE), such as latex or vinyl gloves.

**Hepatitis B Vaccination** Employers must offer and pay for hepatitis B vaccination for employees whose duties could put them at risk of exposure to bloodborne pathogens. If a chiropractor is an employee of a corporation, then the corporation must offer and pay for the vaccination. Employees choosing not to be vaccinated must sign a declination form which is kept in their confidential employee medical file.

**Post-Exposure Evaluation and Follow-up** If an employee is involved in an exposure incident (accident) which could result in transmission of infection, they have a right to medical evaluation and treatment. This follow-up care includes lab tests and counseling and is to be provided at no cost to the employee.

It is hoped that the results of this survey on chiropractic perspectives on bloodborne pathogens will stimulate some thought and discussion about appropriate infection control procedures for the chiropractor's office. Next year, the Department of Labor is scheduled to publish in the Federal Register standards to prevent transmission of tuberculosis in health care settings. These are important and timely public health issues that deserve our profession's serious attention.

Special thanks to those chiropractors who took time from their busy schedules to complete and return the survey, *Chiropractic Perspectives on Bloodborne Pathogens*.

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