Special Article

Occupational Safety and Health Administration Regulations for the Physician's Office

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Mandatory reporting and recordkeeping on job safety were established for all employers by the Occupational Safety and Health Administration (OSHA) Act of 1970. Physician interest in OSHA regulations recently increased with the publication of the Bloodborne Pathogens Standard. This review examines general employer communication to employees about new standards as well as reporting requirements for physician offices, including special OSHA forms needed to comply with illness and injury reporting.

Key words. United States Occupational Safety and Health Administration; occupational health; blood; body fluids; protective clothing. (*J Fam Pract 1993; 36:540-550*)

The Occupational Safety and Health Act of 1970 was enacted to reduce workplace hazards and to implement new and improved safety and health programs.[1] The Act created the Occupational Safety and Health Administration (OSHA) within the US Department of Labor. Mandatory reporting and recordkeeping were established for employers in all states and territories. Half of the states now administer their own occupational and safety programs with standards consistent with the federal requirements.[1] (Those states' offices are listed in Appendix 1.)

The physician's office has been regulated by OSHA law for years.[2,3] Physician interest in OSHA regulations only recently increased with the establishment of the OSHA Bloodborne Pathogens Standard and the subsequent threat of inspections and fines.[4-8] The new OSHA regulations are designed to protect the 5.5 million health care workers at risk of exposure to infection.[4,9,10] Deadlines for compliance with the new regulations in 1992 caused physicians to seek more information about the regulations. This review examines basic physician office requirements for both old and new OSHA standards.

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General Employer Communication and Reporting Requirements

Separate but dependent sets of rights and responsibilities were established for both employees and employers in the OSHA standards.[1] Employees are obligated to follow office rules, wear protective equipment, and report hazardous conditions.[1,4] Employers are required to become familiar with all OSHA standards, communicate the standards to employees, and enforce them in the workplace.[1,4] Some of these communication requirements are listed in Table 1.

The OSHA regulations require that employers in all businesses with 11 or more employees have a reporting and record system to monitor job-related injuries and illnesses. All occupational illnesses should be reported, regardless of the severity of illness. Injury reporting requirements are outlined in Table 2.

Injuries resulting in death or in the hospitalization of five or more employees must be reported to the nearest OSHA office[11] (Appendix 2) within 48 hours. Injury and illness records should be maintained on site for a full calendar year.[1] Although the office's injury and illness records are not routinely sent to OSHA, they must be stored for 5 years and be readily available for inspection by OSHA or state representatives.

Only two special OSHA forms are needed to comply with the workplace recordkeeping requirements. Employers should use OSHA form No. 200 (Figure 1), Log

Table 1. Keeping Employees Informed: Communication Requirements for Employers

The following must be displayed in the workplace:
1. Job Safety and Health Protection Workplace Poster (OSHA 2033 or state equivalent) informing employees of their rights and responsibilities
2. Copies of OSHA citations for violations of standards
3. Log and Summary of Occupational Injuries and Illnesses (OSHA No. 200) including the summary page from previous calendar year, posted each year from February 1 to March 1
4. Summaries of petitions for variances from standards or recordkeeping procedures (if employer unable to comply by an effective date)
5. Color-coded posters, labels, and signs to warn employees of potential hazards
6. A fire evacuation plan
7. Material and Safety Data Sheets (MSDSs) for each product identified as hazardous in the workplace (including product updates and locations of hazardous materials)

The following must be made available to the employee upon request:
1. Copies of the Occupational Safety and Health Act of 1970
2. Copies of relevant OSHA rules and regulations
3. Exposure control plan
4. Written hazard communication program
5. Records regarding exposure to hazardous and infectious materials (all records associated with bloodborne pathogens and chemical exposures)
6. Employee's medical examination records and surveillance and inspection reports

Adapted from All About OSHA.[1]

and Summary of Occupational Injuries and Illnesses, to record any reportable employee illnesses or injuries within 6 days of the employer's notification.[1,6] Form No. 200 must be used to report every occupational death, every occupational illness, and nonfatal occupational injuries listed in Table 2. OSHA form No. 101, Supplementary Record of Occupational Injuries and Illnesses, requires more detailed information and must be filed at the time of any of the above occurrences.[1,6] OSHA form No. 101 must also be completed within 6 days of the employer notification of an illness or injury. A substitute for No. 101, such as an insurance form or worker's compensation form, may be used if it contains all the required information.[1] The summary portion of the last page of OSHA No. 200 for the previous calendar year must be posted in the workplace for the entire month of February each year.

Table 2. OSHA Reporting Requirements for Accidental Injury

1. All accidents resulting in one or more fatalities, regardless of the length of time between the injury and death (Must be reported to OSHA within 48 hours)
2. All accidents resulting in the hospitalization of five or more employees (Must be reported to OSHA within 48 hours)
3. Injury resulting in an employee missing one or more workdays
4. Injury resulting in an employee's restriction of work ability or motion
5. Any injury associated with an employee's loss of consciousness
6. Injury resulting in transfer of an employee to another job
7. Injury resulting in medical treatment being administered to an employee (not first-aid administration)

Adapted from All About OSHA.[1]

Material Safety Data Sheets

Employees must have access to a Material Safety Data Sheet (MSDS) for each hazardous product in the workplace.[2,3,6] The MSDS is an informational document available from the manufacturer that describes the hazardous characteristics of a given product; it provides information on how the product can be safely handled, used, and stored. Hazardous materials in the physician's office include copy machine toner, laboratory chemicals, x-ray solvents, and typing correction fluid.[4] An MSDS must also be available for any pharmaceutical that is not in a solid form (tablets, pills), including liquid medications and parenteral solutions. Staff physicians should develop a list of these materials used in their practice and obtain MSDS forms from the manufacturers. Several companies are developing software to provide CD-ROM access to various MSDS collections.

Bloodborne Pathogens Standard

The purpose of the new OSHA Bloodborne Pathogens Standard is to enforce the concept of universal precautions and to create a safe workplace.[4,6-9] All blood and human body fluids, except urine, feces, and vomitus not visibly contaminated with blood or mixed with other body fluids, are considered to be potentially infectious.[7,9,12] The mandatory OSHA Standard ensures worker access to needed safety materials and equipment. The regulations apply to anyone who may reasonably be expected to contact potentially infectious materials in performing his or her job. Although the new regulations focus on reducing exposure to human immunodeficiency virus (HIV)[4,13] and hepatitis B virus,[4,14] the risk of exposure to all bloodborne pathogens should be limited by implementing these rules.

More than 9000 bloodborne infections are reported by health care workers annually in the United States.[7,9,10] The OSHA regulations include work practice controls, universal precautions, engineering controls, and protective-barrier clothing to reduce exposure to bloodborne pathogens in the workplace.[9,10]

Employee Training Programs

The Bloodborne Pathogens Standard outlines specific requirements to be included in employee training pro-

Bureau of Labor Statistics
Log and Summary of Occupational
Injuries and Illnesses

NOTE: **This form is required by Public Law 91-596 and must be kept in the establishment for *5 years*. Failure to maintain and post can result in the issuance of citations and assessment of penalties.** *(See posting requirements on the other side of form.)*

RECORDABLE CASES: You are required to record information about every occupational **death**; every nonfatal occupational **illness**; and those nonfatal occupational **injuries** which involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment (other than first aid). *(See definitions on the other side of form.)*

Case or File Number	Date of Injury or Onset of Illness	Employee's Name	Occupation	Department	Description of Injury or Illness
Enter a nondupli-cating number which will facilitate com-parisons with supple-mentary records.	Enter Mo./day.	Enter first name or initial, middle initial, last name.	Enter regular job title, not activity employee was performing when injured or at onset of illness. In the absence of a formal title, enter a brief description of the employee's duties.	Enter department in which the employee is regularly employed or a description of normal workplace to which employee is assigned, even though temporarily working in another department at the time of injury or illness.	Enter a brief description of the injury or illness and indicate the part or parts of body affected. Typical entries for this column might be: Amputation of 1st joint right forefinger; Strain of lower back; Contact dermatitis on both hands; Electrocution--body.
(A)	(B)	(C)	(D)	(E)	(F)
					PREVIOUS PAGE TOTALS →
					TOTALS (Instructions on other side of form.) →

OSHA No. 200 ★U.S.GPO:1990-262-256/15419

Figure 1. OSHA form No. 200, Log and Summary of Occupational Injuries and Illnesses.

U.S. Department of Labor

For Calendar Year 19 ______ Page ___ of ___

...pany Name

...blishment Name

...blishment Address

Form Approved
O.M.B. No. 1220-0029
See OMB Disclosure Statement on reverse.

...nt of and Outcome of INJURY						Type, Extent of, and Outcome of ILLNESS													
...ities	Nonfatal Injuries					Type of Illness							Fatalities	Nonfatal Illnesses					
...y ...ed	Injuries With Lost Workdays				Injuries Without Lost Workdays	CHECK Only One Column for Each Illness *(See other side of form for terminations or permanent transfers.)*							Illness Related	Illnesses With Lost Workdays				Illnesses Without Lost Workdays
...r DATE ...th. ...day/yr.	Enter a CHECK if injury involves days away from work, or days of restricted work activity, or both.	Enter a **CHECK** if injury involves days away from work.	Enter number of **DAYS *away from work.***	Enter number of **DAYS** of ***restricted work activity.***	Enter a **CHECK** if no entry was made in columns 1 or 2 but the injury is recordable as defined above.	Occupational skin diseases or disorders	Dust diseases of the lungs	Respiratory conditions due to toxic agents	Poisoning (systemic effects of toxic materials)	Disorders due to physical agents	Disorders associated with repeated trauma	All other occupational illnesses	Enter **DATE** of death. Mo./day/yr.	Enter a **CHECK** if illness involves days away from work, or days of restricted work activity, or both.	Enter a **CHECK** if illness involves days away from work.	Enter number of **DAYS *away from work.***	Enter number of **DAYS** of ***restricted work activity.***	Enter a **CHECK** if no entry was made in columns 8 or 9.
	(2)	(3)	(4)	(5)	(6)	(7)							(8)	(9)	(10)	(11)	(12)	(13)
						(a)	(b)	(c)	(d)	(e)	(f)	(g)						

INJURIES

ILLNESSES

...ertification of Annual Summary Totals By ______________________ Title ______________________ Date ______________

...SHA No. 200

POST ONLY THIS PORTION OF THE LAST PAGE NO LATER THAN FEBRUARY 1.

Table 3. Recommendations for Developing a Facility Exposure Control Plan

1. Identify one (or more) contact person(s) in each office for management and follow-up of the facility exposure plan, training programs, and postexposure programs.
2. Create three lists of occupational exposure in the workplace. The first list of job classifications identifies all employees with occupational exposure to blood or other potentially infectious materials. The second list of job classifications identifies those employees who may have only occasional or possible occupational exposure to potentially infectious materials. The third list identifies tasks and procedures performed that create occupational exposure.
3. Create the documentation records for the exposure control plan, and a chart that describes how your office complies with each of the following regulations: training sessions, workplace controls, sterilization and disinfection, personal protective equipment, sharps disposal, housekeeping, hepatitis B vaccination, postexposure evaluation and follow-up, warning labels, and recordkeeping.
4. Annual employee training sessions must be scheduled and attendance documented. Employee questions must be answered as part of the OSHA training process. The exposure control plan must be updated annually and made available to employees.
5. A confidential medical record file must be established for each employee.

grams.[15,16] Employees should receive a general explanation of the frequency, transmission, and symptoms of bloodborne pathogens.[16] The types, uses, and location of protective equipment should be reviewed. Information on the benefits, safety, and free availability of hepatitis B vaccine should be provided to every employee. The signs and warning labels used in environmental controls in the office should be explained. Information on the actions to take, person to contact, reporting requirements, and medical follow-up of an exposure incident must be provided in employee training programs.[15] Staff should also be provided with a copy of the full OSHA regulations.[16]

The Exposure Control Plan

The new regulations mandate that each office create an exposure control plan that outlines the activities required to comply with the Standard. Table 3 lists general instructions for developing an exposure control plan. Every employer must identify in writing those employees who can reasonably be expected to have work-related contact with potentially infectious material. There must be written procedures for the protection of workers regarding the hepatitis B vaccination, engineering and work practice controls, personal protective equipment, and housekeeping. The plan must contain provisions for training workers in these procedures. The exposure control plan must include written procedures for the evaluation of exposure incidents when they occur.

The exposure control plan must be updated at least annually to reflect changes that affect workers' occupational exposure. These changes may be due to new employee tasks or newly created employee positions that involve exposure. Many medical employers have incorporated existing exposure control plans into their practices, rather than writing their own.[6]

Hepatitis B Vaccination

The Bloodborne Pathogens Standard requires that occupationally exposed employees be offered the opportunity to be vaccinated against hepatitis B. The vaccination is offered after employee training and within 10 days of initial assignment.[15] The vaccination should be performed by a licensed health care professional.

Hepatitis B vaccination must be made available at no charge to all employees who are at risk of exposure.[4,6,9] The vaccination is optional, but the paperwork is not[6,9]; an employer must ensure that employees declining the vaccination sign a waiver that precisely matches the wording in Appendix A of the Bloodborne Pathogens Standard.[4]

Engineering and Work Practice Controls

Engineering controls reduce pathogen hazards by confining potentially infectious materials. Equally important are work practice controls, which reduce the potential for exposure by altering the manner in which tasks are performed. An example of these controls is the use of appropriately placed puncture-resistant sharps containers, which eliminate the need for transporting dangerous sharp instruments and needles.[4,6,9] Recapping of sharps is prohibited; if the physician can demonstrate that there is no feasible alternative, then recapping is permitted by a method that does not use two hands. Mechanical recapping devices are preferred, but in the absence of such devices, physicians may use a one-handed scooping method.[4,6] Frequently emptied sharps containers will prevent employee injury from overfilled disposal containers. Fluorescent orange or orange-red labels, red bags, and red storage containers are the established means of communicating to employees the presence of potentially infectious materials. Laboratory specimens should be stored and shipped in leakproof, puncture-resistant, color-coded containers.[4,6,9]

Employers are required to provide personal protective barriers and equipment to workers who are exposed to bloodborne pathogens. The barriers and equipment must be purchased and cleaned by the employer, be readily available in the workplace, be provided in appropriate sizes, and be made of hypoallergenic materials if

Table 4. Posted Safety Rules for an Office Surgical Room

1. Employees may request specific sizes of protective barriers and hypoallergenic gloves.
2. Fluid-resistant gowns are provided for use when exposure to blood and/or body fluids is anticipated.
3. Recapping of needles may be performed only by using a mechanical device or, in the absence of such, by a one-handed method.
4. Used needles must be immediately disposed of in a sharps container.
5. Gloves should not be reused from patient to patient. When a procedure is completed, gloves should be removed and hands washed.
6. Bending and breaking of sharps or needles is prohibited.
7. Surgical protective gear should be worn when potential exposure exists. Protective equipment such as shoe covers, head caps, and gowns must be removed upon leaving the surgical area or completion of the procedure.
8. Work practice controls consistent with universal precautions, combined with needle precautions and protective barriers, will be enforced.
9. Mask and eye protection must be worn together whenever exposure is reasonably anticipated.
10. No eating, drinking, applying cosmetics, or handling contact lenses is permitted in the surgery room.
11. Spilled or spattered blood or infectious materials will be promptly cleaned up with towels and disposed of in red containers. All spill sites will be cleansed with Clorox or Cidex.
12. Sterile resuscitation masks and the maintained resuscitation cart will remain in the procedures room.

requested or needed by the employee.[4,6,9] Workers are prohibited from washing protective clothing at home. Utility gloves should be offered to all housekeeping staff. Inconvenience or discomfort on the part of the physician or staff is not an acceptable reason to forgo personal protective barriers.

All equipment, working surfaces, and floors must be cleaned and decontaminated with an appropriate disinfectant after contact with blood or body fluids. Handwashing facilities should be readily accessible, and employees must wash their hands immediately after removing gloves. Contaminated broken glassware should not be picked up by hand. Food or drink should be kept from potential exposure areas, and must not be stored in refrigerators or in areas where potentially infectious material is present. Examples of posted rules for an office surgical room are listed in Table 4.

Postexposure Plans

Postexposure follow-up is required by the OSHA regulations (Table 5). In the event of a mucous-membrane or transcutaneous exposure to blood or body fluids, the affected area should be cleansed immediately, or as soon as feasible, to minimize the exposure. The exposure should be reported to the office's designated employee health supervisor to document the circumstances of the exposure and to initiate medical treatment. Employers must provide hepatitis B and HIV antibody testing and counseling to an employee after an exposure. Testing for the HIV antibody is recommended at the time of the incident, and at 3 months, 6 months, and 1 year after exposure.[9,13] The patient to whose body fluids the employee was exposed is evaluated by a chart review and interview with the designated employee health supervisor; when indicated, a blood (HBV or HIV) test is obtained from the patient. The records of employee exposure incidents as well as the other required medical records must be kept confidential in locked files away from the main patient charts (Table 6).

Table 5. Postexposure Follow-up and Treatment

1. Cleanse the area of exposure to minimize infectious risk.
2. Immediately notify the workplace contact person.
3. Seek confidential medical treatment and advice (provided at no charge).
4. Obtain laboratory testing (at no charge), usually consisting of HIV-antibody testing at baseline and 3 months, 6 months, and 12 months after exposure.
5. Create a written report regarding the circumstances of the exposure.
6. The employee has the right to refuse blood testing. If the employee consents to blood testing but refuses HIV testing, the blood must be held for 90 days in the event the employee changes his or her mind.
7. Appropriate postexposure prophylaxis is recommended.
8. The chart of any patient to whose body fluids an employee is exposed should be evaluated. If the patient is considered high risk, the employee is tested for HBV and/or HIV.
9. The employer evaluation/opinion of the outcome of the incident should be completed, with a copy given to the employee within 15 days of evaluation.

Table 6. New OSHA Recordkeeping Requirements for Health Employees

CONFIDENTIAL MEDICAL RECORDS for all employees with occupational exposure must be maintained for an additional 30 years after the employee terminates employment. These records should be stored separately from patient records, and access to the records requires the employee's written permission. The medical records include a copy of the employees vaccination status and copies of the results of all medical examinations and tests.

TRAINING RECORDS must include dates of training sessions, content of the material covered, names and qualifications of trainers, and names and job titles of the trainees. Training records must be maintained for 3 years from the date the training was conducted.

POSTEXPOSURE RECORDS must include the employee's name, social security number, hepatitis-B vaccination status, results of follow-up procedures to exposure incidents, and a copy of the evaluator's written opinion. Exposure records must be maintained for the duration of employment plus 30 years and kept in the employee's confidential medical record.

State Consultation Project Directory

OSHA consultation programs provide free services to employers who request help in identifying and correcting specific hazards or improving safety and health programs, or who need assistance in training and education programs.[1,17] The consultation programs are funded by OSHA and delivered by the professional staffs of state governments.[1,17] The consultation service is provided mainly at the work site. Employers requesting the consultation agree to allow consultants to interview employees and take corrective action if deficiencies are identified.

OSHA consultation programs have been overwhelmed with requests in 1992 prompted by concern over bloodborne pathogen regulations. Requests have come from dentists, morticians, and physicians. One state recently indicated a backlog of several hundred requests, with a 150-day waiting period for a consultation. Participation in a state consultation visit does not result in citations or penalties for deficiencies that are discovered. Physicians can request consultations in their state using the telephone numbers listed in Appendix 3.

Educational Sources

Further information about OSHA regulations for bloodborne pathogens may be obtained through the American Medical Association (AMA) program entitled *For Your Protection: The OSHA Regulations on Bloodborne Pathogens*.[9] This kit provides a model exposure control plan and videotape to assist offices in creating the written document required in the regulations; it can be purchased from the AMA by calling 1-800-438-8821. The American Academy of Family Physicians (AAFP) is offering the *Hazard Communication and Safety Program Policy and Procedure Manual*.[18] This manual and accompanying videotape highlight the policies, procedures, and recordkeeping required by OSHA. The manual can be purchased from the AAFP by calling 1-800-944-0000.

The *Occupational Health and Safety 1992/93 Purchasing Sourcebook*[19] is a valuable resource for purchasing safety products and services. Published in the August 1992 issue of *Occupational Health and Safety*, the sourcebook lists products alphabetically and companies by state to allow quick reference. An updated resource should be published in the latter part of 1993.

Another practical and economical resource for physicians' offices is an AAFP publication on laboratory quality assurance entitled *Physician Office Laboratory Quality Assurance Workshop*.[20] This publication has a section on OSHA that provides printed forms and simple outlines for complying with OSHA exposure regulations. AAFP members can order this resource for $35 by calling the AAFP number listed above.

Laminated copies of Job Safety and Health Protection posters may be purchased from the G. Neil Co. by calling 1-800-999-9111.

The Office of the Federal Register annually publishes current OSHA regulations and standards in the Code of Federal Regulations (CFR).[2,3] The CFR is published each July and is available in many libraries and from OSHA and the National Archives and Records Administration. OSHA's regulations are collected in Title 29 of the CFR, Part 1900-1999.[2,3] For further information contact the OSHA office by calling 202-523-9667. States that administer their own occupational and safety programs also can provide copies of the standards to employers (Appendix 1).

Final Comment

Physicians are rapidly becoming aware of the financial and recordkeeping impact of OSHA regulations on their practices. Implementing the new Bloodborne Pathogens Standard will cost every office an estimated $1200 per year,[4,6,8] according to the Health Care Financing Administration. Some feel the cost is much greater; others believe that implementing these regulations will be time-consuming and burdensome.[16] For all their cost, it is hoped that these new regulations will improve office safety and result in fewer workplace injuries.

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