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AMERICANS WITH DISABILITIES ACT CONSIDERATIONS FOR THE PRACTICE OF OCCUPATIONAL MEDICINE

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The Americans with Disabilities Act (ADA), although developed in the context of civil rights legislation, is likely to have notable impact on the practice of occupational medicine. The ADA contains provisions limiting the use of preplacement examinations to determinations of the capability to perform the essential functions of the job and of direct threat to the health and safety of the job applicant or others. The Title I employment provisions of the ADA establish definitions and requirements similar to those found in section 504 of the Rehabilitation Act of 1973, as amended; leading cases that have been litigated under the Rehabilitation Act, as amended, are described. The limitations of available scientific and medical information related to determinations of job capability and direct threat and ramifications of the ADA on the practice of occupational medicine are discussed.

The Americans with Disabilities Act (ADA) was signed into law on July 26, 1990, with enforcement dates for employers with more than 25 employees of July 26, 1992 and for employers with more than 15 employees of July 26, 1994. The ADA is considered an extension of civil rights legislation: the Title I provisions of the ADA establish legal standards for a number of procedures that relate to the employment process. These standards "prohibit discrimination against qualified individuals with disabilities in all aspects of employment."[1] Persons are considered qualified by having, having had, or being regarded by an employer as having a medical impairment. Over 43 million persons in the United States with a wide variety of orthopedic, cardiovascular, pulmonary, and other medical conditions are estimated to be qualified under the ADA by these criteria.

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The ADA is intended as "enabling" legislation: the intent is to establish standards that encourage the employer to find ways to accommodate disabled workers rather than to find ways or reasons to prevent disabled persons from being employed. Employers are encouraged to define specific job positions in terms of essential job functions and to provide reasonable accommodation in those instances where it is medically determined that a person is incapable of performing the essential job functions or poses a health or safety risk to self or others in doing so.

The purposes for which medical examinations may be provided in relationship to employment are clearly defined under the ADA. Before employment, employers may not make medical inquiries (including questions related to history of Workers' Compensation injury) until a job offer has been made. The job offer may be made contingent on the results of a medical examination, but the employer's use of medical examinations and the information obtained from them is limited to considerations of job capability and "direct threat" ("significant risk of substantial harm to self or others") with respect to the performance of essential job functions.

With respect to other employment-related medical examinations, the ADA does not affect medical examinations required for compliance with government regulations (e.g., OSHA or DOT examinations) or voluntary medical examinations. The ADA also does not prohibit fitness-for-duty, medical surveillance, return-to-work, or disability examinations as long as these are job-related and consistent with business necessity. The information from all employment-related medical examinations, however, is required to be maintained and released according to specific confidentiality provisions. Drug testing is not considered a medical examination under the ADA, but information obtained from drug testing is subject to the confidentiality provisions of the ADA.

Direct Threat: Precedents in the Rehabilitation Act of 1973, as Amended

Although the ADA contains new legal phraseology regarding certain employment standards, it is important to recognize that there are medicolegal precedents for the Title I provisions of the ADA. In particular, the Rehabilitation Act of 1973, as amended, and the case law of surrounding litigation, has provided a template for many of these. The language used in various portions of the ADA and in the associated documentation from

the Equal Employment Opportunity Commission (EEOC)[1] includes many specific phrases that appear in the case law evolving from the Rehabilitation Act of 1973, as amended.

This is most clearly evident with respect to direct threat issues. The ADA requires that medical decisions regarding the hiring of applicants or the placement of current employees be based solely on job capability and direct threat (significant risk of substantial harm) and that such determinations must be based on the worker's present ability to safely perform the essential functions of the job.

In describing precedents available from the Rehabilitation Act, as amended, however, it should be noted that the wording of the standard regarding direct threat in the Rehabilitation Act is different from that in the ADA. The standard for the cases considered under the Rehabilitation Act (and for many cases litigated under state discrimination statues as well) has been "a reasonable probability of substantial harm."[2] Although it is quite unlikely that in many cases the results under either standard would be the same, it remains to be seen as to whether court interpretations of "reasonable probability" differ in practice from "significant risk."

Most occupational physicians and other occupational health providers have had little or no experience in dealing with individual cases litigated under the Rehabilitation Act of 1973, as amended, or state discrimination statutes. To illustrate the ways in which issues related to direct threat may be considered, three leading cases regarded as seminal in the development of case law under the Rehabilitation Act of 1973, as amended, are described below.

Office of Federal Contract Compliance (OFCCP) v E.E. Black, Ltd.[3]

A worker who applied for a job with a construction firm as an apprentice carpenter had done similar work for 3 years. Two years before his application, he experienced low back pain in association with lifting at work and was treated for several months but was able to return to regular work. One year before his application he experienced similar pain during lifting at work but was evaluated and returned to work the same day. On his medical examination before employment, a routine roentgenogram of the spine revealed a partially sacralized vertebra. The applicant was denied

employment based on the examining physician's opinion that the applicant was a "poor risk for heavy labor." The applicant subsequently obtained an orthopedic consultation at his own expense; the consulting orthopedist noted the history of back injuries and found a spina bifida occulta and rotoscoliosis in addition to the sacralized vertebra but stated that none of these would prevent the applicant from performing the job of apprentice carpenter.

In finding for the applicant, the Court established that "whenever (an employer) applies physical or mental job qualification requirements in the selection of applicants or employees for employment or other change in employment status such as promotion, demotion or training, to the extent that qualification requirements tend to screen out qualified handicapped individuals, the requirements shall be related to the specific job or jobs for which the individual is being considered and shall be consistent with business necessity and the safe performance of the job. (The employer) shall have the burden to demonstrate that it has complied with the requirements of this paragraph."

In this case, the Court found that the employer's requirement for a healthy back "met the needed relation to the job and constituted a valid job performance requirement." However, the Court determined that the employer failed to establish that the applicant's medical condition was related to his current capacity to perform the job. Although the Court held that risk of future injury could be the basis for rejection of an otherwise qualified job applicant, the Court held that the employer in this case failed the burden-of-proof requirement to demonstrate reasonable probability of substantial harm.

In establishing this opinion, the Court appointed an independent medical expert, a qualified neurosurgeon, to review the facts of the case and also obtained and reviewed scientific and medical studies related to the patient's condition and roentgenogram findings. The Court found that this evidence was contradictory and inconsistent with respect to demonstrating significant risk of future injury.

Further, the Court "rejected Black's argument that hiring someone with a great risk of future back injury was justified by business necessity because of the very high potential workers' compensation costs....a policy of excluding potential employees to reduce an employer's costs shifts and financial burden to the rejected handicapped individual. This is contrary to the intent of protective statutes such as the Act."

The case discussion emphasized that the impaired worker must be examined with respect to the particular circumstances of job position; an impairment in abstract cannot be evaluated: "the Court believes that the real focus must be on the individual job seeker, and not solely on the impairment or the perceived impairment. This necessitates a case-by-case determination of whether the impairment or perceived impairment of a rejected, qualified job seeker, constitutes, for that individual a substantial handicap to employment."

OFCCP and James W. Thompson v
PPG Industries, Inc.[4]

A worker applied for a job as a production laborer. He had been previously diagnosed with epilepsy but had been seizure-free for 2 years; a few episodes of perceived auras without frank seizure activity involving no loss of consciousness had occurred during this time. The company physician and a consulting neurologist for the company determined that the applicant was at elevated risk for seizures and therefore should not be given the job. The applicant's personal physician, subsequently consulted, stated that in his opinion the applicant was well controlled on medications and no work restrictions were necessary.

In finding for the applicant, the Court opined that the employer has a duty to "gather all relevant information regarding (the applicant's) work history and medical history and independently assess the probability and severity of potential injury; such objective evaluations should be based on facts the employer knew or should have known at the time." The Court deemed that information from the personal physician was important in determining the medical condition of the individual relative to job capabilities or safety risks and that considerations of direct threat may be based on such information as an applicant's previous work history, activities outside of employment, or previous experience in similar jobs: "such a determination cannot be based merely on an employer's subjective evaluation or, except in cases of a more apparent nature, merely on medical reports. The question is whether, in light of the individual's work history and medical history, employment of that individual would pose a reasonable probability of substantial harm."

The Court further found that the restrictions placed by the company physician "often reflected stereotypical assumptions about epileptics, not an assessment of (the applicant's) individual condition in relation to the specific job duties and hazards" and that "(the employer) cannot shield itself from liability by the kind of wholesale, uncritical reliance on medical opinions it demonstrated in this case."

OFCCP v Texas Industries[5]

A woman who applied for a job driving a cement truck was denied employment after a preplacement medical examination revealed a partially sacralized vertebra on routine back roentgenograms as well as a history of partial laminectomy for removal of a herniated disc 9 years previously. An orthopedic surgeon consulted by the employer agreed with the opinion of the company physician that the applicant should be denied employment based on the increased risk of future injury to the person caused by the sacralized vertebra and history of laminectomy. Both physicians also raised concerns regarding public safety posed by the applicant driving a truck suggesting that the onset of back spasms and/or pain during driving activities might be likely to make it impossible for the applicant to control the truck.

The applicant obtained an opinion from the orthopedic surgeon who had performed the laminectomy that she was capable of performing the duties of the job applied for. Although this physician agreed that her risk of future injury was higher than average, he detected no physical limitations and did not believe restrictions were necessary or indicated. The woman subsequently worked for another trucking company for several years without incident, a job that included driving trucks as a contractor for the employer that had rejected her.

In ruling for the applicant, the Appeals Court judged that the likelihood (probability) and certainty (predictability) that an injury will occur is crucial to determinations regarding risk of injury. In particular, the certainty that an injury will occur to the particular person based on individual clinical factors and not simply based on assumptions of risk is important. Medical opinions, even from qualified physicians, may not meet this standard unless substantiated by statistical scientific evidence, historical case descriptions, or information from the patient's medical history. The Court judged that, in certain instances, historical data regarding a person's work history may be as or

more important than medical opinions when issues regarding the likelihood of substantial harm or injury are involved. Considerations of risk to the public might lower the threshold of risk or imminence applicable to an individual case, but such considerations remain even when public safety is concerned.

Job Capability and Direct Threat: Further Discussion

According to the ADA, judgments regarding direct threat must be based on *reasonable medical judgment* and on *current medical knowledge and/or the best objective evidence*[1]. No specific guidelines are provided regarding the degree of risk that is acceptable or unacceptable. However, criteria are outlined by which such risk will be judged. A high probability of substantial harm must be demonstrated, rather than mere demonstration of an elevated risk or of a remote or speculative risk.

The ADA explicitly describes four criteria to be used in determining whether significant risk of substantial harm exists: (1) *probability* -- the statistical likelihood of the harm occurring, (2) *severity* -- the nature and severity of the potential harm, (3) *imminence* -- the time frame in which the harm is likely to occur, and (4) *duration* -- how long the risk is likely to be present.[1]

The case law under the Rehabilitation Act demonstrates how some of these concepts have been interpreted. For example, in the *Texas Industries* case described above, the Court held the opinion that the mere presence of risk that is higher than average is not sufficient. In the *E.E. Black* case, the Court provided an example of imminence that would be sufficient to suggest direct threat, but unfortunately the example given was so extreme that the illustrative value is unclear: a person with a 90% probability of having a heart attack within one month would clearly have an imminent risk constituting direct threat.[3]

There are additional threads that run through the case law with respect to direct threat determinations, some explicitly referred to in the ADA and accompanying documentation. *Case-by-case analysis* is one such principle: impairment considered in the abstract, especially based on diagnostic descriptions alone, is likely to be insufficient for such determinations. It is necessary to consider all aspects of a person's clinical

presentation as well as nonmedical factors in relationship to the specific circumstances of the particular job. Stereotypical assumptions about certain conditions or work activities are unlikely to be upheld if challenged.

It also should be evident that *additional medical opinions* may be helpful in assessing whether direct threat exists, but they provide no guarantee that medical restrictions will be judged valid if challenged. The *medical opinion of the personal physician* is likely to be considered important and may be given more credibility than that of physicians acting as employer agents. To the extent that any and all medical opinions use or refer to *scientific data and statistics* they appear likely to be rendered more credible. However, individualized predictability (the extent to which opinions regarding direct threat can be applied to the particular individual in question) is critical, and may be based on occupational and nonoccupational history in addition to relevant medical factors.

Although it was not deemed relevant in that particular case, the *Texas Industries* case considered the issue as to whether a different standard of risk may be considered in those cases where risk to the public or other workers is present as opposed to those situations in which the risk appears to be limited to the worker. It appears that risk to the public may lower the threshold of risk required to constitute direct threat in individualized determinations. Although the effect is likely to be the same, consideration of such risk may alternatively be weighed as part of the determination regarding the "substantial" nature of the harm.

Currently, the ADA contains no specific mechanism for resolution of professional opinion. It is the responsibility of the employer to obtain valid medical opinions and to decide on an appropriate course of action when conflicting opinions are obtained. A determination that a direct threat to health or safety of the worker or others will not necessarily exclude the employee from a particular job. The employer (using all means available including medical opinions) must determine that reasonable accommodation would not reduce risk to acceptable levels.

Job Analysis, Medical Determinations of Job Capability and Direct Threat, the Medical Standards and Screening

Under the ADA, medical recommendations regarding both job capability and direct threat are required to be made on the basis of the worker's ability to perform the essential functions of the job with or without reasonable accommodation. However, there are no specific requirements regarding the methods to be used to determine essential job functions or the methods to be used to make medical determinations regarding capability or direct threat, although guidelines are provided regarding those factors that may be considered in determining whether a job function is essential.[1]

Methods for job analysis to be used in conjunction with medical examinations have been described.[6,7] These involve determinations of job demands in terms of a combination of ergonomic evaluation, evaluation of other physical and nonphysical job demands, and time allocation to various tasks. The job analysis information is made available to the examining physician, and direct familiarization by the examining physician with specific job demands is advocated.

Few attempts have been made to fully integrate job analysis with the establishment of medical standards. One comprehensive attempt, the San Bernardino study,[8] rates all job functions on scales related to physical capabilities and estimates the capabilities of individuals with particular medical conditions with respect to the scales used to rate job functions. It is unclear, however, whether the rationale and methods for establishing medical restrictions conform sufficiently to the standards required by the ADA with respect to probability, severity, imminence, and duration for such methods to be considered.

All these methods suffer from the need for relatively time-consuming job analysis and the lack of long-term validation studies for the standards described. One attempt at eliminating or reducing the need for physician knowledge of job functions is the "specific" method proposed by Hanman.[9] With this technique, a person is medically rated as to capability of performing specific activities or being able to tolerate specific environmental conditions. This method does not suggest the need for physician knowledge of job conditions, inasmuch as physician recommendations are made in the abstract and subsequently compared with separately assessed analysis of the activities and environmental conditions of the job. Although such a method offers simplicity and may

be useful for initial evaluations, it is unlikely that recommendations made in the abstract by physicians without specific knowledge of job duties will be able to accurately determine whether a worker can perform particular job functions.

Several descriptions of acceptable methodologies and rationale for provision of preplacement examinations exist that are not described in relationship to a specific method of job analysis. The ADA essentially provides legal authority to ethical and scientific guidelines recommended by many authorities for these types of examinations.[10-15] However, such consensus about process is unlikely to mitigate the controversy that can be anticipated because of differences of opinion regarding specific clinical determinations of risk.

For physicians providing preplacement or periodic medical examinations in the context of general prevention/health promotion programs, as suggested by Felton and others,[10,15,16] guidelines such as those recommended by the Preventive Medicine Task Force and other similar efforts provide an excellent basis for age-appropriate examinations.[17,18] Similarly, recommendations are available regarding process and content considerations with respect to preplacement and periodic medical monitoring examinations related to specific chemical and physical hazards, such as those currently regulated by Occupational Safety and Health Administration (OSHA) standards for which there has been National Institute for Occupational Safety and Health (NIOSH) evaluation.[10,12-14,19-21]

Such guidelines, however, seldom provide specific criteria regarding the need for restrictions or removal from exposure based on health or safety risk except related to very specific exposure or health effect indices. Although more general criteria have been established for very specific job functions in safety-sensitive positions (such as for airline pilots and commercial truck drivers), these generally provide little guidance to the clinician faced with making specific recommendations in other job circumstances.[22] The San Bernardino study[8] did attempt to provide a rationale as to employment considerations for a large number of medical conditions, but the medical standards are dependent on the specific job analysis methods described and were intended only as an initial attempt at the development of medical standards.

Ideally, considerations of job capabilities (and especially direct threat) should be based on epidemiologic and/or other scientific information that allows prediction of

capability or risk with respect to specific job tasks. Unfortunately, for the vast majority of job requirements and medical conditions, there is little or no sound scientific information on which a clinical judgment can be based, placing great responsibility on the individual clinician to attempt to make a valid clinical judgment in the absence of good predictive data. In the introduction to the most comprehensive review to date of issues related to medical evaluations for job capability and health risk, the editors note "clinicians must be aware of the considerable scientific uncertainty involved in these evaluations.[23]

A strong argument can be made that, given this uncertainty, there is little value to such medical determinations. Indeed, a number of authors have raised the question of the value of preplacement medical examinations and discussed the various considerations faced by employers and occupational physicians in determining whether such examinations are likely to be of benefit.[24-27] However, given the continued presence of workplace hazards as well as the emergency of new types of occupational disease, and the increasing costs associated with the treatment of occupational accidents and illnesses, it is likely that extensive use of both medical examinations and various screening modalities will continue.

Although the ADA does not permit the use of medical screening of workers for the purpose of reducing an employer's costs related to the treatment of future illness or injury (occupational or nonoccupational), it does not prohibit screening tests for job capability or direct threat. According to the ADA, such screening tests should offer valid predictive accuracy (particularly in relationship to sensitivity, specificity, and positive predictive value) and should not screen out impaired or handicapped persons, or other groups of workers (such as certain minorities or women), unless a clear business need is demonstrated.[1] Even demonstration of a clear business need may be insufficient if screening methodologies used selectively screen out specific groups.

A great deal of confusion has been generated by guidelines previously published by the EEOC (the Uniform Guidelines on Employee Selection Procedures) with respect to both the Rehabilitation Act of 1973, as amended, and the ADA.[28] These guidelines represent the most comprehensive effort to date by the EEOC to define valid screening principles in terms of statistical validity relative to concerns regarding discrimination, yet these guidelines are specifically noted by the EEOC *not* to apply to the Rehabilitation Act of 1973, as amended, or the ADA. It remains to be seen whether individual Courts will

consider these or similar standards relevant to determinations of direct threat in individual cases.

Some authors[29-31] have advocated the use of certain screening methodologies with respect to the performance of specific physical tasks, especially materials handling and movement. Screening methodologies based on ergonomic analysis of specific job tasks followed by simulation of those tasks in screening evaluations have been used to assess both capability and risk. Such methodologies, depending on the screening standards used, may be consistent with ADA requirements regarding direct threat determinations. Because these usually require extensive ergonomic analysis and specific validation before use, the utility of such methods may be limited, and when held to high scientific standards, most screening methodologies fail because of unacceptable standards of sensitivity and specificity.[32,33]

What constitutes acceptable sensitivity and specificity, however, is likely to vary depending on the perspective taken, e.g., employer or applicant for employment. Individual Courts also are likely to vary in the interpretation of such standards, so the success or failure of particular methods legally is difficult to predict. Employers and occupational physicians will need to carefully consider the value of such screening methods and carefully scrutinize such methods from the medical, legal, and ethical perspective to assess the likelihood that specific methods will be considered acceptable within the framework of the ADA.

Additional questions are raised with regard to such screening, particularly with respect to the distinction between medical and nonmedical screening modalities. Certain aspects of screening programs are clearly medical in nature, such as the determination of the presence of disqualifying medical conditions. Others are considered nonmedical, such as agility tests performed before placement in law-enforcement positions.[1] For many screening modalities, however, the distinction is likely to be less clear, such as various types of strength testing that may be performed to determine job capability or direct threat. The place of such examinations in the employment process, e.g., before or after a job offer, and whether a physician is required to participate in such determinations is likely to require specific assessment based on the characteristics of the screening modality used.

Confidentiality Issues and Drug Testing: Brief Notes

The confidentiality provisions of the ADA provide legal constraints regarding information release that are supportive of ethical guidelines currently in use.[1,34] It is unfortunate, however, that the law did not more clearly address the problem of access to medical records by nonmedical personnel and that ADA requirements are currently somewhat contradictory. Although information given by medical providers to supervisors and management personnel is limited to descriptions of necessary restrictions and accommodations, the Technical Assistance Manual[35] describes procedures for the handling of medical information and records that suggest that employer representatives involved in hiring, human resources, or personnel functions may not be considered "management" personnel for purposes of information dissemination. The Technical Assistance Manual describes keeping medical records separate from other personnel records, and recommends limiting access to such records. However, there are no specific provisions limiting such access to qualified medical personnel. We hope some additional provisions in the future may address this double standard.

Provisions related to substance abuse and drug testing should result in eligibility for employment for those persons who have received adequate treatment after substance abuse has been detected. It will be difficult for occupational physicians and other occupational health providers to make determinations regarding current versus past use and to determine when adequate rehabilitation has occurred. The need for recommendations regarding continued or follow-up treatment and/or drug testing is likely to become more frequent.

ADA Impact on the Practice of Occupational Medicine

The impact on the practice of occupational medicine that the ADA is likely to have is difficult to predict. The Rehabilitation Act of 1973 and many individual state statutes contain provisions similar to the provisions of the ADA, yet the widespread perception that these laws had failed to establish fair employment practices with respect to handicapped workers contributed to the enactment of the ADA. In contrast to these previous statutes, there now appears to be a high degree of awareness of the ADA on the part of employers, occupational physicians, other occupational health providers, and the

legal community. In addition, specific budget allocations to the EEOC for enforcement are substantial. Finally, because the ADA has the empowerment of federal mandates, the legislation supersedes local or state legislation of lesser impact and provides uniformity. For these reasons the ADA is likely to have substantial repercussions in terms of changes in employment practice, and case litigation.

It is also important to recognize that the specific impact of the ADA on case law, and the ways that such case law will subsequently affect the practice of occupational medicine, will depend to a great extent on the interpretation placed on certain key phrases in ADA. Indeterminate wording and the use of new phraseology that has yet to be interpreted in case law add to the difficulty in predicting the extent to which legal standards established under the ADA may call for changes in occupational medical practice. Jurisdictional differences are certain to further add to confusion and to make it likely that the true impact of the ADA will not be completely felt until enough cases have been taken to higher Court levels to establish some clear legal precedents.

Despite these caveats, the ADA is likely to positively impact occupational medicine practice. The confidentiality provisions of the ADA should provide some impetus to the use of practices previously justified on primarily ethical grounds. Provisions related to drug testing and substance abuse appropriately reflect substance abuse as a treatable medical illness, although new challenges will be present with respect to making determinations regarding current substance abuse and ascertaining when rehabilitation has occurred.

Further benefit should accrue from the impetus to the development of standardization in procedures and practices related to preplacement medical and screening evaluations and other employment-related medical examinations, although in many cases the law requires more specificity than medical science currently can provide. Such standards, however, reflect a policy of enablement of workers with disabilities at the cost of conservative hiring strategies. In response to this, medical resources may be refocused from global (and somewhat superficial) preemployment screening to more sophisticated analysis of qualification, accommodations, and modification of work.

Occupational physicians and other occupational health providers are more likely than before to be challenged in terms of providing recommendations consistent with current medical, scientific, and ethical information and guidelines. It is likely liability

issues for physicians under the ADA will reflect previous issues that have arisen in the context of employment-related examinations. These included breaches of confidentiality, improper authorization to perform duties that involve direct threat, negligent interference with a contractual relationship, and failure to communicate results of examinations to workers.[36,37]

The ADA, although establishing standards by which employment-related medical examinations and screening must be conducted, does not resolve more fundamental issues for employers and occupational physicians regarding the value of such examinations in a variety of situations. Complex issues related to employer benefit, worker benefit, and public benefit make generalizations impossible regarding decisions as to the frequency and content of such examinations and testing.[14,26,38] At the least, employers and occupational physicians should be less likely to consider use of screening modalities that fail to meet EEOC requirements regarding predictive validity.

The ADA may have the overall impact of forcing industry, especially small industry, to implement health and safety practices that emphasize prevention rather than screening. Many employers have mistakenly assumed that employment-related medical examinations could be used to screen out workers likely to have work-related injuries, despite the dubious scientific as well as legal basis for this practice. The ADA, by requiring that standards consistent with current medical knowledge be used, as well as by requiring reasonable accommodation, may effectively force industry to emphasize strategies including engineering controls, use of personal protective clothing and equipment, and education to improve workplace health and safety practices as the primary means of reducing workplace accidents and injuries. Employment-related medical examinations, valuable tools as part of an employer's overall health and safety program, may be used more in this context as a result of the ADA.

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