The use of neuropsychiatric assessments such as the Wechsler Adult Intelligence Scale (WAIS), Halstead-Reitan, or Luria-Nebraska batteries may be useful in determining brain function abilities and limitations. These tests can establish subtle changes in mentation often seen in closed head injuries. In addition, repeated testing during recovery may aid in establishing new profile levels.

In a majority of individuals who are injured, the most significant degree of improvement in learning, memory, and communication occurs within the first year after stabilization of the underlying cause. Re-evaluation should occur more frequently during this recovery period. In illnesses resulting in progressive impaired cognitive functions (brain tumor, Alzheimer’s disease, etc.), frequent review of abilities may be required.

**CATEGORY L-M: Learning Memory and Communication**

<table>
<thead>
<tr>
<th>PROFILE LEVEL</th>
<th>CIRCUMSTANCES</th>
<th>APPROPRIATE WORK ACTIVITY</th>
<th>POSSIBLE ACCOMMODATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No past or current limitation</td>
<td>All</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>Past limitation, full recovery</td>
<td>All</td>
<td>None</td>
</tr>
<tr>
<td>3</td>
<td>Ability to learn new complex tasks with usual supervision</td>
<td>Learning new complex tasks</td>
<td>None</td>
</tr>
<tr>
<td>4</td>
<td>Ability to perform previously learned complex job tasks with usual supervision</td>
<td>Doing previously learned complex tasks with usual supervision</td>
<td>None</td>
</tr>
<tr>
<td>5</td>
<td>Ability to perform previously learned complex job tasks with special supervision</td>
<td>Doing previously learned complex tasks with special assistance</td>
<td>Careful training</td>
</tr>
<tr>
<td>6</td>
<td>Ability to learn new simple job tasks with adequate supervision</td>
<td>Learning simple tasks with supervision</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Ability to perform simple job tasks with usual supervision</td>
<td>Doing simple tasks with usual supervision</td>
<td>Simplification of tasks and careful supervision</td>
</tr>
<tr>
<td>8</td>
<td>Special circumstances such as ability to perform simple job tasks with special supervision</td>
<td>Doing simple tasks with special supervision</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Under evaluation</td>
<td>Depending on situation</td>
<td>Temporary adjustments</td>
</tr>
<tr>
<td>10</td>
<td>Temporary or permanent limitation where any type of work is not appropriate</td>
<td>None</td>
<td>Review if improved</td>
</tr>
</tbody>
</table>
CATEGORY L-P: PSYCHIATRIC/PSYCHOLOGICAL/EMOTIONAL DISORDERS

Psychiatric disorders, even those which affect a person more globally (e.g., psychosis), do not consistently compromise a person’s ability to work safely and productively. The effect of psychiatric disorders and emotional conditions on the functional capacity for work varies greatly between individuals as well as within individuals over time. This makes the prediction of work capacities difficult, even for persons with like diagnosis. Psychiatric disorders commonly contribute to demoralization and lowered self esteem. Therefore, the restoration of a capacity to work may have a favorable impact upon recovery from an episode of psychiatric illness. Sensitive attention to a series of progressively declining accommodations in the workplace may have special importance for ultimate recovery.

Medications used with management of psychiatric disorders may contribute side effects which interfere with safe and productive work. More often than not, such side effects diminish or disappear following dosage adjustment and adaptation to the drug regimen. When levels of alertness, concentration or coordination are affected by medication side effects, the profile level should be correspondingly adjusted to reflect improvement or decline.

The following definitions may help when assessing the limitations imposed by the worker’s disorder and/or treatment regimen:

a. **Judgment** refers to the worker’s practical capacities to respond to customary work expectations with appropriate, effective and sustainable work behaviors consistent with peers.

b. **Adaptation** means the capacity to cope with reasonable stress in the workplace without deterioration of performance. Such stress may reasonably include attendance, making work-related decisions, meeting schedules, completing tasks, and interacting with peers and supervisors.

c. **Social functioning** refers to the worker’s capacity to interact appropriately and communicate with adequate effectiveness with others.

d. **Concentration** (also includes capacity for persistence and pace) refers to the worker’s ability to sustain focused attention long enough to permit the timely completion of tasks commonly found in work settings.

Substance use disorders occur with greater frequency among persons with psychiatric disorders. It is important that such coexisting disorders be recognized and treated in order to diminish limitations affecting work performance. Likewise, other psychiatric problems of learning, such as memory or communication may coexist. Giving more than one profile level (L-M, L-P, or L-S) for the same person may be appropriate.

The assignment of work activities should take into account the person’s current capacities with respect to safety for self and others and sufficient time to relearn old tasks and regain strength, pace and persistence with duties. Workers who drive vehicles must comply with driver license guidelines. Those operating potentially dangerous machinery should be evaluated following the same principles.

The success of accommodations in the workplace for persons with psychiatric disorders relates directly to the sensitivity and creativity with which supervision is conducted. Such accommodations may involve:

a. breaks and rest periods
b. reducing extraneous stimuli
c. frequent feedback with emphasis on positive accomplishments
d. exenuation from shift work when sleep cycle is impaired
e. reduction of job complexity into more defined component parts
f. flexibility in assigning coworkers
g. selective inattention for minor social gaffes
h. modeling concentration, pace, and persistence
i. closer monitoring of tasks which may involve danger to self or others
### CATEGORY L-P: PSYCHIATRIC/PSYCHOLOGICAL/EMOTIONAL DISORDERS

<table>
<thead>
<tr>
<th>PROFILE LEVEL</th>
<th>CIRCUMSTANCES</th>
<th>APPROPRIATE WORK ACTIVITY</th>
<th>POSSIBLE ACCOMMODATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No history of psychiatric or emotional condition; no past limitation</td>
<td>All</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>Past history of psychiatric or emotional condition; past limitation in full remission for 3 years</td>
<td>All</td>
<td>None</td>
</tr>
<tr>
<td>3</td>
<td>Current psychiatric or emotional condition with mild intermittent limitations of judgment, adaptation, social functioning, or concentration</td>
<td>Frequent monitoring of full array of assigned duties</td>
<td>Minimal and temporary use of accommodations</td>
</tr>
<tr>
<td>4</td>
<td>Current psychiatric or emotional condition with mild persistent limitations of judgment, adaptation, social functioning, or concentration</td>
<td>Selective reassignment of some tasks which prove too difficult, leading to a more productive work routine</td>
<td>Minimal and more permanent accommodations</td>
</tr>
<tr>
<td>5</td>
<td>Current psychiatric or emotional condition with moderate intermittent limitations of judgment, adaptation, social functioning, or concentration</td>
<td>Close supervision of limited work activities using progressively more complex of tasks</td>
<td>Progressive application of more complex accommodations</td>
</tr>
<tr>
<td>6</td>
<td>Current psychiatric or emotional condition with moderate persistent limitations of judgment, adaptation, social functioning, or concentration</td>
<td>Close supervision of limited work activities which challenge residual capacities</td>
<td>Supportive and structured accommodations</td>
</tr>
<tr>
<td>7</td>
<td>Current psychiatric or emotional condition with severe limitations of judgment, adaptation, social functioning, or concentration</td>
<td>Close supervision and highly selective assignment of tasks. Work activities should not be permitted which involve any risk to the individual or others.</td>
<td>Significant limitations and accommodations</td>
</tr>
<tr>
<td>8</td>
<td>Special circumstances</td>
<td>Depending on specific problem</td>
<td>According to situation</td>
</tr>
<tr>
<td>9</td>
<td>Under evaluation</td>
<td>Close supervision and highly selective assignment of tasks. Work activities should not be permitted which involve any risk to the individual or others.</td>
<td>Significant limitations and accommodations; temporary adjustments</td>
</tr>
<tr>
<td>10</td>
<td>Current psychiatric or emotional condition with potential risk to self or others; and/or with commitment status</td>
<td>None</td>
<td>Review if improve</td>
</tr>
</tbody>
</table>
CATEGORY L-S: SUBSTANCE USE DISORDERS

Substance use means inhaling, swallowing, or injecting any substance that has the potential to impair one’s cognitive, emotional, or motor functioning. The general categories of these substances are: (1) alcohol; (2) illicit substances, such as opiates, amphetamines, cocaine, and marijuana; (3) substances not intended for human consumption, such as inhaling solvent fumes; and (4) prescription drugs, such as narcotic pain relievers, stimulants, sedatives, and anxiolytic agents.

Substance abuse means using these substances in such a way that there are demonstrated evidences of or history of continuing episodes of impairment of one’s cognitive, emotional, or motor functioning.

Side effects from the appropriate use of prescribed medications would not be considered abuse (e.g., sedation as a side effect from using anxiolytic agents for the treatment of panic disorder). While these side effects could impair functional ability, they would be evaluated under the category of the primary illness (e.g., Psychiatric/Psychological/Emotional for panic disorder).

Tests which may be useful for making a diagnosis of substance abuse and for profiling include: random blood alcohol testing; random urine or hair drug analysis; documentation of compliance with requirements of an approved treatment program; and documentation of regular attendance at self-help recovery groups.

Substance use disorders put an individual at a high risk of being a danger to self or others in the workplace. Examples of work activities that potentially put the individual or others at risk include: operating machinery, operating motor vehicles, and making decisions that involve others.

Limitation of work activities might involve a shift from active physical activity, use of tools or equipment, etc., to a sedentary or less job where consequences of substance abuse would offer no risk to others, provided the essential functions of the job can be accomplished.

The profile sheet is only a general guideline and must be applied with common sense to the individual’s actual work situation. For example, an individual with a chronic severe substance abuse problem who refuses treatment might not be impaired at work if his/her job was such that there was no risk to self or others and his work performance was acceptable to his employer. However, on the other hand, an individual with only infrequent, mild episodes of impairment from substance use outside the workplace might be at too great a risk to continue work activities which involve a high potential for harm to self or others.

In all cases where moving equipment is involved, Driver’s License Guidelines should be adhered to, whether a commercial driver license is required or not.
## CATEGORY I-S: SUBSTANCE USE DISORDERS

<table>
<thead>
<tr>
<th>PROFILE LEVEL</th>
<th>CIRCUMSTANCES</th>
<th>APPROPRIATE WORK ACTIVITY a</th>
<th>POSSIBLE ACCOMMODATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No history of substance abuse</td>
<td>All</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>History of substance abuse in remission for five years or more</td>
<td>All</td>
<td>None</td>
</tr>
<tr>
<td>3</td>
<td>History of substance abuse in remission for two to five years</td>
<td>Moderately high risk*; normal supervision; appropriate monitoring</td>
<td>Occasional reinforcement; normal monitoring; increased supervision; some limitation of work</td>
</tr>
<tr>
<td>4</td>
<td>History of substance abuse in remission for six months to two years</td>
<td>Moderate risk*; intermittent supervision; appropriate monitoring</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>History of substance abuse within the past six months - currently in treatment and/or attending self-help recovery groups</td>
<td>Slight risk*; close supervision; appropriate monitoring</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>History of substance abuse within the past six months - not currently in treatment and not attending self-help recovery groups</td>
<td>Limited risk*; close supervision; appropriate monitoring</td>
<td>Special supervision; limiting work activities</td>
</tr>
<tr>
<td>7</td>
<td>Chronic substance abuse with or without demonstrated episodes of impairment of cognitive, emotional, or motor functioning in the workplace</td>
<td>Limited risk to self*; close supervision; appropriate monitoring</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Special circumstances</td>
<td>Depending on situation</td>
<td>According to situation</td>
</tr>
<tr>
<td>9</td>
<td>Under evaluation</td>
<td>Work activities should not be permitted that involve any risk to the individual or others</td>
<td>Temporary adjustment</td>
</tr>
<tr>
<td>10</td>
<td>Chronic substance abuse with frequent episodes of demonstrated impairment of cognitive, emotional, or motor functioning in the workplace</td>
<td>None</td>
<td>Review if improved</td>
</tr>
</tbody>
</table>

* See narrative for Category B-E (Epilepsy and Other Episodic Disorders) for definitions of risk level.

a In all cases where vehicles are used at work, a proper license is required, based on Utah Functional Ability in Driving Guidelines.
CATEGORY M-M: GENERAL MEDICAL DISORDERS

There are many general medical disorders which do not fall into any of the listed special categories. These include:

- Generalized infections, without localized pattern.
- Weight problems, anorexia, cachexia, malnutrition, etc.
- Generalized symptoms, such as arthritis of multiple joints, or other generalized inflammatory disorders.
- Geriatric problems; not identified elsewhere.
- Relatively sable kidney impairment, with or without dialysis.

Generalized symptoms of endocrine or metabolic disorders which often involve decreased strength or stamina. These disorders include hypo- or hyper function of the pituitary, the thyroid, the parathyroid or the adrenal glands.

If another category is more specific, that category should be used. For example, a person may have generalized symptoms of malnutrition in the presence of chronic ulcerative colitis. This should be profiled under the gastroenterology category.

However, a person with generalized symptoms of an infection may have seizures and would require profiling under the Category B-F (Epilepsy) as well as Category M-M (General Medical Disorders Category).

Some general medical disorders have a fluctuating course, so that a reasonable limiting profile may be made as an average, with a suggestion that reasonable accommodation might include (1) abences because of symptoms or to permit necessary visits for medical care or therapy sessions; (2) more than the usual number of rest periods; (3) changes in work positions, as from standing to sitting, etc.

Frequently, there may be an ability to do certain kinds of work but there is limited stamina. Thus any of the profiles may be modified by suggesting a limitation on hours per day or per week. (See report form.)

If an individual uses a medical device, medications, or modified equipment to enhance his functional ability, he should be profiled for the resulting higher level of performance, rather than at a lower level without the device or medication.
### CATEGORY M-M: GENERAL MEDICAL DISORDERS

<table>
<thead>
<tr>
<th>PROFILE LEVEL</th>
<th>CIRCUMSTANCES</th>
<th>APPROPRIATE WORK ACTIVITY*</th>
<th>POSSIBLE ACCOMMODATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No past limitation</td>
<td>All</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>Past limitation, fully recovered</td>
<td>All</td>
<td>None</td>
</tr>
<tr>
<td>3</td>
<td>Slight decrease in stamina</td>
<td>Heavy duty with reduced hours</td>
<td>Minor schedule or work adjustment</td>
</tr>
<tr>
<td>4</td>
<td>Slight decrease in strength, mobility and/or stamina</td>
<td>Medium duty</td>
<td>Special equipment to decrease exertion, such as mechanical aids, lifting devices, changing work surfaces, limiting hours, rest periods, etc.</td>
</tr>
<tr>
<td>5</td>
<td>Moderate decrease in strength, mobility and/or stamina</td>
<td>Light duty</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Marked decrease in strength, mobility and/or stamina</td>
<td>Sedentary</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Risk to others (contagious diseases, etc.)</td>
<td>Limited exposure to others</td>
<td>Masks, washing, etc., as appropriate</td>
</tr>
<tr>
<td>8</td>
<td>Special circumstance, including problems in remission, but with increased risk of recurrence</td>
<td>Depending on specific problem</td>
<td>According to situation</td>
</tr>
<tr>
<td>9</td>
<td>Problem under evaluation</td>
<td>Depending on situation</td>
<td>Temporary adjustments</td>
</tr>
<tr>
<td>10</td>
<td>Health problem when work activity is inappropriate</td>
<td>None</td>
<td>Review if improved</td>
</tr>
</tbody>
</table>

* See Appendix III for levels of work.
CATEGORY M-S: GENERAL SURGICAL DISORDERS

General surgery covers a broad field and includes several subgroups.

The medical aspects of most conditions dealt with are covered under the profiles of medical specialties.

Profiles for the general surgical disorders category are to be used to cover the following:

(a) Functional abilities of post-operative patients. This will most frequently refer to abdominal procedures, including operations on the gastrointestinal tract and biliary tract, hernias, spleen and retro-peritoneal structures, etc. Conditions for which the operations were performed include congenital abnormalities, infections, tumors, degenerative diseases, and trauma.

   This profile may be temporary and may be changed to indicate increasing ability in a recovering patient, or may be changed to reflect a progressive downward course. The frequency of change will vary according to individual situations.

(b) Functional ability of post-operative patients whose primary condition may relate to a surgical subspecialty, but the other category may not reflect an adequate post-operative profile status. Whichever profile gives the most adequate description of the patient’s ability and/or suggestions for accommodations may be used.

(c) Functional abilities of disorders commonly treated by general surgeons and frequently followed by them over an extended period of time. These cases may include a variety of conditions, such as trauma, stomas, fistulas, cancers and leg ulcers, if the case does not fall into profiles for general medicine, hematology-oncology or other sub-specialties, etc.

   Functional abilities are reduced by anatomical defects resulting from the disease or operation, as well as the loss of strength and stamina incident to the disease or the operative recovery. A careful history and physical exam will provide most of the information needed for profiling.

   Endoscopic surgical procedures which do not require a major incision should be profiled according to the pattern of anticipated recovery, rather than according to the time frame suggested for major surgery shown on the profile sheet.

   Special circumstances include the wearing of tubes, alternate routes of nutrition, on special diets, etc. In cases of loss of consciousness or control, individuals should also be profiled under Category B-E for episodic disorders.

   Suggested accommodations may vary according to specific problems. For example, individuals with a stoma usually require private toilet facilities. With decreased stamina, limited hours of work are suggested.
## CATEGORY M-S: GENERAL SURGICAL DISORDERS

<table>
<thead>
<tr>
<th>PROFILE</th>
<th>CIRCUMSTANCES</th>
<th>APPROPRIATE WORK ACTIVITY*</th>
<th>POSSIBLE ACCOMMODATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No past limitation</td>
<td>All</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>Past limitation, fully recovered (over 2 mos. after most operations)</td>
<td>All</td>
<td>None</td>
</tr>
<tr>
<td>3</td>
<td>Recovered with slight decrease in stamina</td>
<td>Heavy duty with reduced hours</td>
<td>Limit hours of heavy duty or total hours</td>
</tr>
<tr>
<td>4</td>
<td>Slight decrease in strength and/or stamina, e.g., over 2 m. after hemia repair</td>
<td>Medium duty</td>
<td>1) Special equipment to decrease exertion, such as: lifting devices 2) changing work surfaces 3) rest periods 4) limited hours 5) changes in work assignments</td>
</tr>
<tr>
<td>5</td>
<td>Moderate decrease in strength and/or stamina, e.g., 2nd m. after operation</td>
<td>Light duty</td>
<td>1) Special equipment to decrease exertion, such as: lifting devices 2) changing work surfaces 3) rest periods 4) limited hours 5) changes in work assignments</td>
</tr>
<tr>
<td>6</td>
<td>Marked decrease in strength and/or stamina e.g., 1st m. after operation</td>
<td>Sedentary</td>
<td>1) Special equipment to decrease exertion, such as: lifting devices 2) changing work surfaces 3) rest periods 4) limited hours 5) changes in work assignments</td>
</tr>
<tr>
<td>7</td>
<td>Problem in remission, but with increased risk of recurrence</td>
<td>According to nature of problem</td>
<td>According to nature of problem</td>
</tr>
<tr>
<td>8</td>
<td>Special circumstances, not covered above, including risk to others</td>
<td>Depending on specific problem</td>
<td>According to situation, (Change of duties, hours, or facilities.)</td>
</tr>
<tr>
<td>9</td>
<td>Problem under evaluation</td>
<td>Depending on situation</td>
<td>Temporary adjustments</td>
</tr>
<tr>
<td>10</td>
<td>Health problem when work activity is inappropriate</td>
<td>None</td>
<td>Review if improved</td>
</tr>
</tbody>
</table>

* See Appendix III for levels of work.
Appendix I

PRINCIPLES USED IN DEVELOPING GUIDELINES FOR DEFINING FUNCTIONAL ABILITY IN THE WORKPLACE*

1. Guidelines and standards should be the least restrictive possible consistent with the continuing good health of the individual and the safety of co-workers and the public involved.

2. Functional ability to work safely, rather than impairments, should receive emphasis.

3. Some impairments will permit working safely under appropriate limitations with the use of compensating personal devices, or with reasonable accommodations in the workplace.

4. Fairness should prevail in these ways: (a) medically impaired workers should not be required to meet guidelines and standards of expected safety or performance in excess of those expected of unimpaired workers; and (b) workers with different kinds of impairments, but with similar estimated increases in work risk, should have as nearly the same limitations and accommodations as possible.

5. A system for profiling all aspects of a person’s health which may adversely affect a worker either intermittently or continuously will be made available to all health care professionals, agencies, employers, or others who may find them valuable.

6. Health care professionals should not be expected to function as police, advocates, prosecutors, or judges in the process of workers’ evaluations, but as individuals skilled in diagnosis and accurate reporting of functional ability, as well as teachers and advisors of their patients.

7. Since the ultimate responsibility for safety will concern all workers, they should be involved in self-evaluation, in cooperation with medical evaluators, employers, and others concerned.

8. Every opportunity should be used to educate all workers about the effects of physical and emotional health problems, use of drugs, etc., on their ability to work without harm to themselves or others.

9. If anything related to medical profile reporting can be simplified, this should be done.

10. Health care professionals are invited to help put into effect these principles of safety and fairness, and to increase workers’ awareness of health in relation to work.

* In 1979, the Utah State Driver License Medical Advisory Board faced a similar challenge to develop functional ability guidelines for driving, which have been successfully used since then. Principles used by them have been paraphrased to apply to defining functional ability in the workplace.
Appendix II

THE AMERICANS WITH DISABILITIES ACT*

This section provides background on the Americans with Disabilities Act (ADA) and compares and contrasts the concepts of the Guides with those of the Act. The provisions of the ADA governing employment-related decisions (Title I) became effective on July 26, 1994, for private-sector organizations that employ 15 or more employees. Because the intent of the ADA is to compel organizations to employ qualified individuals with "disabilities," it is likely that physicians will experience an increasing demand for giving guidance to employers with respect to an individual's "disability" status. In addition, there will be questions regarding performance capability, acceptability of risk to self or others, the need for accommodation, and the type of accommodation that may be warranted. It is important to recognize that none of these is a medical issue.

The following definitions are based on the concepts of EHOC, Title I Regulations and Interpretive Appendix (29 CFR 1630).

1. "Accommodation" means modification of a job or workplace that enables a "disabled" employee to meet the same job demands and conditions of employment required of any other employee in the same, or a similar, job. Accommodation need be considered only with respect to the essential functions of a job. Reasonable accommodation means accommodation that does not result in undue cost or hardship to the employer.

2. "Disability" means a physical or mental impairment that substantially limits one or more of the major life activities of the individual, or a record of such an impairment, or being regarded as having such an impairment. Note: Special exclusions exist.

3. "Essential functions of a job" means the fundamental duties of the employment position that the disabled individual seeks or holds. Essential functions may be understood to be those elements of a job such that failure in one or more of the elements would be cause for removal from the job. "Essential functions" do not include marginal functions.

4. "Major life activities" means such functions as caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working.

5. "Physical or mental impairment" means the following:
   a. Any physiologic disorder or condition, cosmetic disfigurement, or anatomic loss affecting one or more of the following body systems: neurologic, musculoskeletal, special sense organs, respiratory (including speech organs), cardiovascular, reproductive, digestive, genitourinary, hemic and lymphatic, skin, and endocrine systems; or
   b. Any mental or psychological disorder, such as mental retardation, organic brain syndrome, emotional or mental illness, and specific learning disabilities.

6. "Substantially limits" means the following:
   a. The person is unable to perform a major life activity that the average person in the general population can perform;
   b. The person is significantly restricted as to the conditions, manner, or duration under which he or she can perform a particular major life activity, compared to the conditions, manner, or duration under which the average person can perform the same activity.

The ADA uses the term "disability," and its use of the concept is similar to the concept of "impairment" used in the Guides. It is important to note, however, that under the ADA identification of an individual with a "disability" does not depend on the results of a medical evaluation. An individual may be identified as having a disability if there is a record of an impairment that has substantially limited one or more major life activities or, of greater concern, if the individual is regarded as having a disability.

In carrying out and reporting the results of an impairment evaluation, it is essential that the physician distinguish carefully between an impairment that is documented in accordance with Guides criteria and a presumed impairment that is based on nonmedical factors. Clearly, a question exists as to whether or not an impairment based on Guides criteria automatically will constitute a "record" of an ADA-covered disability or signify that the individual is "regarded" as having such a disability.

"Accommodation" is not a medical matter. Accommodation is the result of an employer's decision regarding modifications of a job or workplace that are "reasonable" with respect to the employer's cost and the degree of hardship imposed. The physician may be able to help an employer understand the relationships between a medical impairment, the demands made of an individual in the workplace, and the individual's capabilities. The physician also can help the employer explore the need for accommodation. But it is not appropriate for the physician to recommend a specific accommodation.

Once the employer determines it is appropriate to accommodate an individual's disability and redefines the job or workplace, the physician's role is to answer the following question: "Is there a medical reason to believe it is not feasible or appropriate to assign these tasks and duties to this person under these [specified] working conditions?"

Appendix III

LEVELS OF WORK

The physical demands of different jobs vary over a wide range. The outline which follows is widely used and generally understood both by lay and professional people. Generally, a clinical appraisal of the individual will provide information to define an appropriate level of work as indicated on the profile sheet for each category.

It is obvious that some functions, such as vision or hearing, do not relate to physical work level definitions, but most categories including musculoskeletal, cardiovascular, pulmonary and other general medical problems require an understanding of the meaning of various levels of work.

### PHYSICAL DEMAND CHARACTERISTICS OF WORK

<table>
<thead>
<tr>
<th>PHYSICAL DEMAND LEVEL</th>
<th>OCCASIONAL 0-50% OF WORKDAY</th>
<th>FREQUENT 50-65% OF WORKDAY</th>
<th>CONSTANT 67-100% OF WORKDAY</th>
<th>TYPICAL ENERGY REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Heavy</td>
<td>Over 100 lbs.</td>
<td>Over 50 lbs.</td>
<td>Over 20 lbs.</td>
<td>Over 7.5 METS</td>
</tr>
<tr>
<td>Heavy</td>
<td>100 lbs.</td>
<td>50 lbs.</td>
<td>20 lbs.</td>
<td>6.4-7.5 METS</td>
</tr>
<tr>
<td>Medium</td>
<td>50 lbs.</td>
<td>20 lbs.</td>
<td>10 lbs.</td>
<td>3.6-6.3 METS</td>
</tr>
<tr>
<td>Light</td>
<td>20 lbs.</td>
<td>10 lbs. and/or</td>
<td>Negligible Pull/Push of</td>
<td>2.20-1.5 METS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Walk/Stand/Push of</td>
<td>Arm/Leg controls while</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>seated</td>
<td></td>
</tr>
<tr>
<td>Sedentary</td>
<td>10 lbs.</td>
<td>Negligible</td>
<td>Negligible</td>
<td>1.5-2.1 METS</td>
</tr>
</tbody>
</table>

The terms "occasional," "frequent" and "constant" refer to the frequency of "exerting a force," which includes lifting, carrying, pushing, pulling or any other similar physical activity. Repetitions in the course of an average workday are: occasional - 1-100; frequent - 100-500; and constant -500+ plus. Thus, if a person is given a profile level for a medium level of work, he may be expected to lift 50 pounds occasionally, but only 20 pounds if required to do so one-third to two-thirds of the shift.

If walking is involved, light duty is generally considered as allowing walking at a rate of 2.5 mph or slower if carrying up to 10 lbs. Medium duty involves walking up to 3.5 mph or slower if carrying up to 25 lbs. Heavy duty calls for walking up to 3.5 mph and carrying up to 50 lbs.

For spine problems, concern for bending and twisting movements will require a more limited profile.

Occasionally, a "medium-heavy" level of work may be used by extrapolating to values approximately midway between "medium" and "heavy."

A person is not expected to be kept entirely pain-free at work, but it is a judgment call to determine what medication and/or exercise program is reasonable to make possible a less limiting functional profile level and hence a more demanding level of work. Often it is impossible for a person to be restored to full function or to be entirely pain free. The health care provider should emphasize functional ability and make his determinations as objective as possible, including in the evaluation an assessment of pain involved.

Since the ability to accomplish "very heavy" work depends to a large extent on natural physique, conditioning and motivation as well as health factors, the guidelines in this publication do not go beyond the "heavy" classification. This is with the understanding that anyone profiled for a "heavy" work level is eligible from a health standpoint also to do "very heavy" work, provided the other elements of physique, conditioning, etc. are present, which can be judged better by job supervisors than by medical personnel.

Specialized testing may be useful in evaluating functional ability for work levels, especially in cardiopulmonary cases. Using a motorized treadmill, it is possible to relate the exercise to excess energy expended and to a functional work level. The excess energy is expressed in terms of METS, which represents the multiples of resting metabolic energy for a given activity. One MET is considered to be 3.5 ML/kg/min. For example, a 150-pound man who burns 1.2 K cal/min while sitting at rest uses approximately 3 METS when walking at a rate of 2.5 miles per hour.

While most individuals can reliably describe their work setting, it is often very valuable for a health care professional to visit the worksite or consult with work supervisors for more accurate job information.


51
GLOSSARY

It is anticipated that these Workplace Functional Ability Guidelines will be of value as a means of communication involving not only health professionals, but those in other disciplines. To facilitate this, a number of less used medical as well as other terms relating to the workplace have been included in the glossary. Where some terms have multiple meanings, we have selected the one that seems best to express the meaning in the context of its use in these Workplace Guidelines.

Many of the terms used have been defined for our purposes in the narrative section under each category. Some definitions have been taken from *Guides to the Evaluation of Permanent Impairment* (AMA Fourth Edition-1993). Others come from: *Webster's Collegiate Dictionary* (Merriam Webster 1993) or *Webster's Medical Dictionary* (Merriam Webster 1986). The use of the generic he/him/his is meant to include she/her/hers, as may be appropriate.

Where indicated, a page number in parenthesis after the definition suggests the principal place the term is used.

A

**Ability** - competence in doing.

**Accommodation** - modification of a job or workplace that enables a "disabled" employee to meet the same job demands and conditions of employment required of any employee in the same, or similar job, considered only with reference to the essential functions of a job. (See Reasonable accommodation.) (3,50)

**Activities of Daily Living (A.D.L.)** - an individual's capacity to carry out daily activities. Examples are: self-care, personal hygiene, communication, physical activity, sensory function, hand functions, travel, sexual function, sleep and social/recreational activities. See Major life activities. (3,50)

**Affect** - relating to feelings or emotions.

**Aggravate** - to make worse, more serious, or more severe.

**Alcohol abuse** - alcoholism; continued excessive or compulsive use of alcohol. (41,43)

**Allergen** - a substance that produces allergy, or altered bodily reactivity. (19,37)

**Allergy** - altered bodily reactivity to a substance previously exposed to, often manifest by sneezing, respiratory embarrassment or skin reaction.

**American With Disabilities Act (A.D.A.)** - an act of Congress which became effective on 26 July, 1994, for organizations with 15 employees, or more, which requires them to employ individuals irrespective of "disabilities" and/or to make reasonable accommodations, as long as the "essential functions" of the job can be accomplished. (3,50)

**Anemia** - condition of blood which is deficient in red blood cells, hemoglobin or volume. (23,34)

**Ankylosis** - stiffness or fixation of a joint. (7,9,11,3)

**Antigen** - a substance capable of stimulating an immune response. (19,23,37)

**Arthritis** - inflammation or degenerative changes in joints. (7,9,11,13)

**Asthma** - a condition often of allergic origin that is marked by continuous or paroxysmal labored breathing accompanied by wheezing, sense of constriction, or coughing or gasping. (19)

**Atopic (dermatitis)** - skin reaction produced by exposure to an exciting antigen or allergen. (37)

**Autonomic** - referring to the part of the nervous system that governs involuntary actions, such as secretion, constriction or peristalsis. (15,25)
Bilateral - affecting both the right and left sides.

Bronchodilator - a drug that relaxes bronchial muscle, resulting in expansion of the bronchial air passages, often used in treating asthma. (19)

Bullous - marked by a large vesicle or blister. (37)

C

CDL (Commercial Drivers License) - a license to drive commercial vehicles on the highways. (17)

Cardiology - study of heart action and diseases. (21)

Cardiovascular - involving heart and blood vessels. (21)

Cataplexy - sudden loss of muscle power without loss of consciousness. (17)

Category - a division within a system of classification.

Central acuity - ability to see details directly in line of sight rather than peripherally, a function of the macula. (25)

Cerebrovascular - involving the brain and blood vessels supplying it. (15)

Coagulation system - elements of the body related to the clotting of blood. (23)

Chiropractic - a system of therapy which holds that disease results from a lack of normal nerve function and which employs manipulation and specific adjustment of body structures (as in the spinal column).

Cognition - conscious intellectual function. (39)

Congestive heart failure - inability of the heart to maintain adequate circulation of blood. (21)

Conjunctivitis - inflammation of the mucous membranes of the inner surface and front part of the eyeball. (25)

Coronary - referring to arteries or veins of the heart. (21)

Costovertebral angle - area where the lowermost ribs meet the vertebral column. (31)

Cystoscopy - insertion of an instrument into the bladder to examine it. (31)

D

Decibel (dB) - a unit for expressing the relative intensity of sounds. (27)

Dermatology - branch of medicine dealing with the skin. (37)

Diabetes - disorder characterized by inadequate secretion of insulin, excessive urine production, excessive amounts of sugar in the blood and urine and by symptoms of thirst, hunger and weight loss. (35)

Dialysis (kidney) - processing blood so as to remove metabolic impurities and returning the blood to the body. (31, 45)

Disability - physical or mental impairment that substantially limits one of the major life activities. Under A.D.A. this includes a record of or being regarded as having such impairment. See Appendix I. (50)

Disability determination - See Social Security disability determination.

Disfigurement - altered or abnormal color, shape or structure of a visible body part. It may produce social rejection, impairment of self-image with self-imposed isolation, alteration of life-style or other adverse changes. (37)

Dominant - one of a pair of body structures that is more effective or predominant in action, as in hand or eye. (9, 25)

Drug abuse - use of illegal drugs or improper (usually excessive) use of legal substances or medications. (43)
Dyshidrosis - abnormality of sweat production.

Dyspnea - difficult or labored breathing. (19,27)

Dysuria - painful or difficult discharge of urine. (31)

Edema - abnormal accumulation of fluid in connective tissue, often causing swollen legs. (21)

Endoscopy - visualizing or doing procedures inside an organ through a tube-like instrument, without an open surgical incision. (47)

Epilepsy - any of various disorders usually manifest by episodes of loss or clouding of consciousness or control, based on disturbed electrical activity of the brain, including grand mal, petit mal or partial complex seizures. (17)

Episodic disorders - recurring abnormal body conditions usually interfering with awareness or normal body control, such as cardiac arrhythmia, Meniere’s disease, narcolepsy, etc. (17,20,21,27,35)

Essential functions (of a job) - functional duties of a job such that failure in one or more of the elements would be cause for removal from the job. See Appendix II. (3,50)

Fatigue - weariness from labor or exertion.

Fistula - an abnormal passage leading from a hollow organ to the body surface or from one organ to another. (29,47)

Functional - related to physiologic rather than structural functions, or related to psychological functions rather than organic structures. (13,41)

Functional ability - an individual’s capability to accomplish work or other major life activities despite certain known limitations. (1)

Gastroenterology - study of disease and pathology of the stomach and intestines. (29)

Genitourinary (G.U) - system of organs concerned with production and excretion of urine and with reproduction. (21,33)

Gynecology - branch of medicine that deals with the diseases and hygiene of women. (33)

Health care - of, relating to, or concerned with maintaining and restoring health by the treatment and prevention of disease especially by trained and licensed professionals (as in medicine, dentistry, clinical psychology, and public health). Currently, this also includes podiatrists, chiropractors, physician assistants and nurse practitioners. (1)

Heavy work: See Work levels. (51)

Hematology - branch of medicine that deals with the blood and blood-forming organs. (23)

Hematopoietic - referring to the formation of blood or blood cells. (23)

Hematuria - presence of blood or blood cells in the urine. (31)

Hemoptysis - spitting of blood from some part of the respiratory tract. (19)

Hernia - protrusion of an organ or part through connective tissue or through a wall of a cavity in which it is normally enclosed; a rupture. (25,47)

H.I.V. - a retrovirus implicated as the agent causing the immunodeficiency in AIDS. (23)

Hypertension - abnormally high arterial blood pressure. (21)

Hypersensitivity - state of being abnormally susceptible to a specific agent, as a drug or antigen.

Hypoglycemia - abnormal decrease of sugar in the blood, usually occurring in diabetes as a consequence of using too much insulin for the person’s food intake. (35)
Immunology - study of the body’s response to an antigen that involves the interaction of the antigen with lymphocytes that produce antibodies and lymphocytes capable of reacting with it and rendering it harmless. (23)

Impairment - loss, loss of use, or disengagement of any body part, system or function, or mental or psychological disorder.

Incontinence - inability to retain bodily discharge (urine or feces) voluntarily. (29,31)

Inflammation - a local response to cellular injury that is marked by capillary dilatation, leukocytic infiltration, redness, heat, pain, swelling and often loss of function. (25,37)

Insulin dependent (diabetes) - diabetes not controlled by oral medications, but requiring injections of insulin to keep the blood sugar in satisfactory range. (35)

Irritation - a condition of soreness, roughness or inflammation of a body part. (37)

Irritant - something that tends to produce inflammation. (19,37)

Keloid - a thick scar resulting from excessive growth of fibrous tissue. (37)

Keratitis - inflammation of the cornea of the eye characterized by burning or smarting, blurring of vision and sensitivity to light, caused by infectious or noninfectious agents. (25)

Levels of work - definitions of the relative physical demands of various work activities. In these profiles, levels are defined in terms of increasing demands as sedentary, light, medium, and heavy. Additional limitations may be applied at each level. See Appendix III (3,51)

Major life activities - functions such as caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning and working. See Appendix II. (50)

Malignant hypertension - essential hypertension characterized by acute onset or severe symptoms, rapidly progressive course and poor prognosis. (21)

Meniere’s disease - a disorder of the inner ear that is marked by recurrent attacks of dizziness, tinnitus, and deafness. (27)

Metabolic - referring to the chemical changes in living cells by which energy is provided for vital processes and activities and new material assimilated. (35,45)

METS - multiples of resting metabolic energy for a given activity, one MET being 3.5ML/(kg/min). (51)

Miscarriage - spontaneous expulsion of a human fetus before it is viable. (33,34)

Monocular - involving or affecting a single eye. (25)

Musculoskeletal - relating to or involving both muscles and bony parts. (7,9,11,13)

Narrative - a telling of details, or commentary.

Neurology - study of the nervous system in respect to structure, functions, abnormalities and diseases of the brain, spinal cord and peripheral nerves. (15)

Nurse practitioner - a registered nurse who has completed advanced training and is qualified to assume some of the duties formerly taken on by a physician. (1)
Obscurational device - a covering over an eye to make the image from that eye dim or indistinct. (25)

Ocular motility - ability to control the movement of the eyes to direct gaze. (25)

Oncology - study and treatment of tumors. (23)

Ophthalmology - branch of medicine dealing with the structures, functions and diseases of the eye. (25)

Orthotic - a support or brace for weak or ineffective joints or muscles. (7,9,11,13)

Otolaryngology - a medical specialty concerned especially with the ear, nose and throat. Also called otorhinolaryngology. (27)

P

Parkinson's disease - a chronic, progressive nervous system disease of later life that is marked by tremor and muscle weakness and by a peculiar gait. (15)

Peripheral visual field - See Visual field. (25)

Peristalsis - successive waves of involuntary contraction passing along the walls of the intestine or other hollow muscular structure and forcing its contents onward. (2,50)

Physiatrist - a physician who specializes in physical medicine.

Physician assistant - a specially trained person who is certified to provide basic medical services, usually under supervision of a licensed physician; abbr. P.A. See Health care. (1)

Placental abnormalities - disordered structure or function of the vascular organ that unites the fetus to the maternal uterus and mediates its metabolic exchanges. (33)

Podiatry - the care and treatment of the human foot, called also chiropody. (1)

Pneumoconiosis - disease of the lungs caused by habitual inhalation of irritant mineral or metallic particles, including black lung and silicosis. (19)

Pre-menstrual syndrome (P.M.S.) - a varying group of symptoms manifest in some women prior to menstruation that may include emotional instability, irritability, insomnia, fatigue, anxiety, depression, headache, edema, and abdominal pain. (33)

Profile - a representation of the extent to which an individual or group exhibit traits as determined by tests or ratings.

Prosthetic - relating to an artificial device to replace a missing part of the body. (7,9,11)

Psychosis - a serious mental illness, characterized by defective or lost contact with reality, often with hallucinations or delusions. (41)

Pulmonary - relating to, functioning like, associated with, or carried on by the lungs. (19)

Psoriasis - chronic skin disease characterized by circumscribed red patches covered with white scales. (37)

Pyuria - presence of pus in the urine. (31)

R

Reasonable accommodation - accommodation that does not result in undue cost or hardship to the employer. See Accommodation and Appendix II. (3,50)

Rectal - referring to the terminal part of the intestinal tract, between the end of the large intestine and the anus. (29)

Rehabilitation - physical restoration of a sick or disabled person by therapeutic measures and reeducation to allow participation in the activities of a normal life within limitations of his physical or mental impairment. Vocational rehabilitation focuses on the goal of gainful employment. (2,50)

Renal disease - disorder involving or affecting the kidneys. (31)
Retroperitoneal space - the space between the posterior abdominal wall and the thin covering which contains the kidneys, pancreas, aorta and other structures. (29,47)

Rhinitis - inflammation of the mucous membranes of the nose. (27)

Sign - an objective evidence of disease, especially as observed and interpreted by the physician rather than by the patient or lay observer.

Social Security disability determination - an administrative medical and social evaluation of a person's "inability to engage in any substantial gainful work." This includes an appraisal not only of medical or psychological conditions, but also the person's age, education, work experience and availability of work of a sort he might do in his area. In a sense, it represents the converse of a medical functional ability profile except where the profile level 10 (no work) is appropriate. (2,50)

Stamina - staying power, endurance.

Stoma - an artificial permanent opening, especially in the abdominal wall made as part of a surgical procedure. (29,47)

Substance abuse - use of a variety of potentially impairing things in such a way as to produce demonstrated episodes of impairment of cognitive, emotional, or motor functioning. (43)

Substantial - real or true, not imaginary or illusionary, as in restrictions under which a person can perform a major life activity, such as work, as compared to the average person. See Appendix II. (50)

Suprapubic - referring to the area just above the inferior element of the pelvis or above where the pubic bones meet.

Sympathetic (nervous system) - the part of the nervous system concerned especially with preparing the body to react to situations of stress or emergency. (7,11)

Symptom - subjective evidence of disease or physical disturbance observed by the patient. See Sign.

Syncope - a partial or complete temporary suspension of respiration and circulation, usually with cerebral ischemia, characterized by sudden pallor, coldness of the skin, and partial or complete unconsciousness. (17,21)

T

Teratogen - an agent related to or causing developmental malformations in the fetus. (33)

Toxemia of pregnancy - a disorder peculiar to pregnancy, usually of sudden onset, and marked by hypertension, albuminuria, edema, headache, and visual disturbance, and which may be accompanied by convulsions. (33)

U

Ulcer - a break in skin or mucous membrane with loss of surface tissue.

Ulcerative colitis - inflammatory disease of the colon characterized by diarrhea with discharge of mucus and blood, cramping abdominal pain, and inflammation and edema of the mucous membrane with patches of ulceration. (29)

Urethra - the canal that carries off the urine from the bladder and in the male serves as a genital duct. (31)

Urinary calculus - a concretion of mineral occurring in any portion of the urinary tract; also called kidney stone. (31)

Utah Medical Association - a voluntary association of physicians in the state of Utah whose purpose is to improve the quality of care for patients and represent the interests of its physician members. It is an affiliate of the American Medical Association.

V

Vertigo - a disordered state which is associated with various disorders (as of the inner ear) and in which the individual or his surroundings seem to whirl. (27)