

CATEGORY D: CARDIOVASCULAR

Cardiovascular disorders may affect functional ability in the workplace through a variety of mechanisms. These may involve the heart itself, its valves, its muscles, its intrinsic vessels, its conducting and regulating mechanisms or its linings and coverings as well as the peripheral vessels supplied by it. These disorders fall into the three groups shown below. A provisional profile level may be determined by means of a careful history and clinical examination, but additional tests, such as stress EKGs or treadmill tests, are useful, if available. (See Appendix III for work levels).

Disorders with Relatively Stable Cardiac Function

Coronary heart disease (CHD) is most commonly due to arteriosclerosis of the coronary arteries. Impairment results from activity-limiting angina pectoris and/or reduced ventricular function. Chest pain should not be classified as angina pectoris without an objective measurement of myocardial ischemia. Myocardial damage may also cause cardiac arrhythmias.

A person should not return to work immediately after an infarction, but most are ready to resume sedentary work in 6 weeks and light duty in 3 months, with subsequent profiles depending upon the individual case. Participation in a cardiac rehabilitation program is likely to facilitate return to work.

Valvular heart disease may be caused by congenital, rheumatic, infectious, or traumatic factors, or a combination of them. Impairment results from decreased cardiac output and may be reduced, but not fully reversed, by catheter-based interventional procedures, operative repair, or replacement of the valve with a prosthetic device.

Other disorders affecting heart function, such as other types of myopathy, constrictive pericarditis, etc., may be profiled using similar guidelines.

Disorders of Rhythm and Conduction

A dysrhythmia is defined as one or more heart beats generated at a site other than the sinus node. A conduction abnormality is defined either as an impulse that is generated in the sinus node, but not transmitted normally through the conducting system or an abnormality in impulse initiated in the sinus node. Both abnormalities may occur in patients with structurally and functionally normal hearts or in patients with any type of organic heart disease. They may cause syncope, weakness and fatigue, palpitations, dizziness, light-headedness, chest heaviness, or shortness of breath and sudden cardiac death. The severity of associated symptoms varies widely.

Careful evaluation should provide objective documentation that symptoms are correlated with the dysrhythmia or conduction abnormality. The functional profile should be modified as the effect of medication and/or mechanical intervention are observed. If a dysrhythmia causes recurring loss of consciousness or control, guidance for profiling and appropriate work restrictions will be found under Category B-E (Epilepsy and Other Episodic Disorders).

Hypertensive Cardiovascular Disorders

Sustained elevation of blood pressure may lead to damage of arterial walls and damage of the organs supplied by these vessels, especially the brain and the kidneys. Several determinations of blood pressure should be made. If a secondary cause of hypertension (e.g., coarctation of the aorta, renal artery stenosis, renal parenchymal disease, hyperaldosteronism, Cushing's disease, pheochromocytoma or chronic nocturnal hypoxia resulting from sleep apnea syndromes) is identified, these should be treated and an evaluation of functional ability should be based on residual problems. Antihypertensive medications can maintain blood pressure within the normal range in most patients without correctable causes of hypertension. Essential hypertension is expected to plateau with little likelihood of significant future change once the blood pressure has come under control with medication and a less limiting functional ability profile is appropriate.

ier Considerations

covery time after coronary artery bypass surgery varies, but in the vast majority of cases, there is successful revascularization l individuals may return to work in 6 to 8 weeks. These or other unusual patients may be handled at Level 8 (Special cumstances) initially, before moving to more demanding levels.

ll of the above conditions, response to medications and/or other interventions will fluctuate with time, so that a change in profile y be made from time to time to reflect the functional ability of the heart.

ulmonary hypertension develops, an additional profile under Category C (Pulmonary Disorders) may be appropriate. If a person a stroke, the person should also be profiled under Category B-G (General Neurology). If there is significant renal impairment, person may be considered under Category M-M (General Medical Disorders).

CATEGORY D: CARDIOVASCULAR

PROFILE LEVEL	CARDIAC FUNCTION (Infarction, Angina, etc.)	ARRHYTHMIAS CONDUCTION DEFECTS	HYPERTENSION	APPROPRIATE WORK ACTIVITY *	POSSIBLE ACCOMMODATIONS
1	No past or current limitations			All	None
2	Past limitation, fully recovered.			All	None
3	Minimal heart disease without limited function, under medical management	Previous abnormality under full control with medication	Hypertension with BP <140/90 on medications, without complications.	Heavy	Avoid excessive hours.
4	Mild heart disease without limited function, but with increased risk of recurrence, under medical management.	Infrequent episodes, without risk to self or others.	Hypertension with history of stroke or definite hypertensive changes in retina.	Medium	Utilize lifting and carrying devices; Modify duties.
5	Heart disease with moderate symptoms, under medical management	Moderately frequent episodes without risk to self or others.	Hypertension, with diastolic BP usually >120 mm Hg and/or complications noted above without congestive failure.	Light	
6	Severe heart disease with marked symptoms despite medical management	Recurring episodes with risk to self or others, as from falling.#	Hypertension as above and/or history of congestive heart failure with persisting symptoms.	Sedentary	Minimize walking to work site. Limit physical exertion. Consider limiting hours.
7	Heart disease where work disruption may cause risk to others#			Tasks not involving risk to others	Consider change of duties or transfer.
8	Special circumstances			According to problem	According to situation
9	Under evaluation			Depends on situation	Temporary adjustments
10	Severe impairment where work activity is inappropriate		Malignant hypertension	None	Review if improved

* See Appendix III for work levels.

See Category B-E (Epilepsy and Other Episodic Disorders)

CATEGORY E: HEMATOLOGY, IMMUNOLOGY AND ONCOLOGY

The hematopoietic system has several components. The red cells are involved with oxygen transport. White blood cells are critical to the immune system. Platelets are involved in coagulation of the blood; in conjunction with other important proteins related to clotting, they ensure appropriate blood clotting.

Functional impairment related to anemia can generally be corrected or ameliorated significantly with transfusion. In certain chronic disorders such as sickle cell anemia, chronic hemolytic anemias, or myelodysplastic disorders, corrective therapy is not available and chronic transfusions are impractical or of limited value. In these cases, impairment is dependent upon the ability of the cardiovascular system to compensate for the anemia. Anemia and associated problems include these problems as well as abnormal bleeding, etc., with varying degrees of loss of stamina. Medical assessment should include measurement of the hemoglobin level, cardiovascular reserve, and transfusion requirements. Individuals with anemia requiring transfusions may be profiled at approximately the following levels, depending upon how well they respond to being transfused. Level 5 requires \leq two transfusions per year; Level 6 requires \leq three transfusion per year; and Level 7 requires up to five transfusions per year.

Functional impairment of the coagulation system can occur in platelet disorders or with impairment in the production or function of critical clotting proteins. Impairment is generally limited to musculoskeletal deformities that occur as a result of recurrent bleeding and can be assessed under that profile.

Functional impairment related to abnormalities of white blood cells or the immune system can result in increased susceptibility to frequent or life threatening infections. Medical appraisal should address signs or symptoms of the underlying disease, ability to perform activities of daily living, and frequency of therapeutic intervention. With HIV infection, existing cognitive impairment should be assessed under that profile.

Functional impairment in oncology includes disabilities occurring as a result of the involved organ system and should be assessed under that profile. Medical assessment should include consideration of signs or symptoms that occur as a result of the tumor itself or as a result of therapy, frequency of therapeutic intervention, and ability to perform activities of daily living.

For clarification of the various work levels shown as "Appropriate Work Activity" reference is made to Appendix III.

The suggested possible accommodations listed are general in nature and should be adapted to an individual case as indicated on the Report Form, and may include limited hours, special schedules for work early in the day, time off for day-time treatments, intermittent rest periods, or even work in the home, provided the essential functions of a job may be accomplished. Since a person's status may fluctuate, a time for profile review should be indicated on the report form.

CATEGORY E: HEMATOLOGY, IMMUNOLOGY AND ONCOLOGY

CATEGORY	ANEMIA/ASSOCIATED PROBLEMS	IMMUNE SYSTEM & CANCER	APPROPRIATE WORK ACTIVITY *	POSSIBLE ACCOMMODATION
1	No past or current limitation	No past limitations	All	None
2	Past limitations, fully recovered	Past limitations, fully recovered	All	None
3	Minimal anemia; no limitations of physical activity	Asymptomatic disease; no treatment needed	Heavy	None
4	Mild anemia, etc., with discomfort associated with marked exertion	Minimal symptoms; infrequent treatment needed	Medium	Use of lifting/carrying devices; modifying work requirements
5	Moderate anemia, etc. with symptoms on moderate exertion	Minimal symptoms; periodic treatment required	Light	
6	Moderate anemia with symptoms on light exertion or with decreased stamina	Moderately symptomatic; frequent treatment required	Sedentary or limited standing	Limiting physical exertion, special rest periods or hours of work.
7	Severe anemia with decreased stamina	Moderately symptomatic; continuous treatment required	Sedentary or other limited duties	Use of special workbench or tools, limited hours, special rest periods
8	Special circumstances	Symptomatic disease; special circumstances	Depending on specific problem	According to situation
9	Under evaluation		Depending on situation	Temporary adjustment
10	Severe anemia; requires > five transfusions/year	Unable to carry out normal ADLs	Unable to work	Review if improved

* See Appendix III for levels of work.

CATEGORY F: OPHTHALMOLOGY

The visual system may be involved in four principle ways:

- (1) Loss of central acuity
- (2) Loss of visual fields
- (3) Change in ocular motility
- (4) Infection or inflammation of the eye and related structures.

Of these, the most commonly seen in terms of functional ability in the workplace is loss of central acuity, which is readily determined with regular eye charts. Except in rare cases where corrective lenses or contact lenses cannot be used on the job, the best corrected vision should be used in profiling.

Chronic monocular loss of vision, including blindness in one eye is not usually a handicap in the workplace except for tasks with unusual visual requirements such as interstate truck driving. However, acute loss of central or peripheral vision should be profiled more cautiously until accommodation to the problem has been accomplished.

Peripheral visual field loss may be critical in certain jobs, but in most cases some constriction does not compromise job effectiveness provided there is adequate central acuity. However, if work includes use of vehicles or moving equipment, the same standards as are applied to Utah drivers should be used. If fields are at least 120 degrees total for one or both eyes together risks comparable to driving light vehicles are acceptable. If total fields for both eyes are between 90 degrees and 120 degrees, limitation should be set according to requirements of the job. Individuals with less than 90 degrees total fields should not be assigned to work around moving vehicles or operate large moving equipment. With less than 20 degrees total fields, a person is considered severely impaired but able to do many types of tasks, with appropriate accommodation.

If sophisticated equipment is not available, visual fields may be estimated by careful confrontation testing.

Except in special conditions of operating commercial vehicles, problems of diplopia may be overcome by use of obscuration devices for most on-job functions.

Conjunctivitis or keratitis related to allergens or irritants in the workplace may prevent an individual from continuing to work in a place where the allergens/irritants cannot be eliminated.

Acute viral conjunctivitis is contagious and the person should not work in situations where others may be exposed until after recovery. The patient may be profiled at Level 8 (Special Consideration) or under Category MM (General Medical) if the contagious aspects are a major concern.

Other eye conditions such as significant disfigurement may also be identified at Level 8 (Special Considerations) and appropriate recommendations should be made.

If the eye problems are associated with other general or neurologic conditions, they should be profiled according to those categories in addition to the visual one.

Suggested accommodations include: encouragement of car pools for workers without driver licenses; job assignments to avoid hazards; use of bells or other signals; assignment to tasks which may be done using non-visual clues or methods such as answering phones, use of low-vision devices such as magnifiers, closed circuit television, etc.

CATEGORY F: OPHTHALMOLOGY

PROFILE	CIRCUMSTANCES	APPROPRIATE WORK ACTIVITY*	POSSIBLE ACCOMMODATIONS
1	No past limitation (corrected acuity 20/40 each eye; full visual fields)	All	None
2	Past limitation, fully recovered (same as above)	All	None
3	Slight loss of vision in better eye: 20/40 to 20/80	All except commercial driving or equivalent risk	Regular use of appropriate corrective lenses
4	Moderate loss of vision in better eye: 20/100 to 20/200	All except those with undue personal risk from heavy moving equipment or power tools	Use of low vision aids, signals, etc
5	Severe loss of vision in better eye - between 20/200 & 20/400	Activity generally limited to desk or work bench	Use of low vision aids, audible signal devices
6	Loss of useful vision - less than 20/400 in both eyes	Tasks using sound signals telephone, etc	Use of other means of communication, voice, signals, etc. Encourage car pools & escorts
7	Conjunctivitis or keratitis related to allergens or irritants in the workplace	All but tasks related to specific allergens or irritants	Use of eye protection & improved ventilation. Consider re-assignment.
8	Special circumstances	Depending on specific problem	According to situation
9	Under evaluation	Depending on situation	Temporary adjustments
10	Health problem where work activity is inappropriate	None	Review if improved

* All profiles based on use of corrective lenses if indicated.

CATEGORY G: OTOLARYNGOLOGY (ENT)

This category concerns those problems which involve the structures around the nose, mouth, and throat and closely-related structures, including the sinuses and ears (hearing and balance, and the voice box). Some of those difficulties are better profiled under other categories as noted below.

The most common problem affecting workers is impairment of hearing, which may be measured accurately by devices in common use for pure tone measurement.

Except in unusual circumstances, it is to be presumed that any person with only a unilateral hearing loss is able to accomplish the essential functions of the job assigned.

If one has a bilateral hearing loss, one's functional ability is limited by one's ability to communicate, to be communicated with, or by safety factors, with loss of functional ability as indicated on the profile.

Olfaction (smell) and taste disorders may reduce functional ability in special circumstances only, e.g., those who rely upon their taste or smell in their professions (cooks, perfume manufacturers, wine tasters, etc.). In these cases, if the problem does not respond to treatment, the only solution would be to reassign these individuals to other job categories.

Disturbances of equilibrium may be either persistent or episodic. The former may affect gait and station in a way similar to generalized neurologic disorders and may best be profiled under Category B-G (General Neurologic). There may be significant paroxysmal disturbance, as in Meniere's disease, where workers may be episodically incapacitated but function normally in between attacks, and may best be profiled according to Category B-E (Epilepsy and Other Episodic Disorders).

Defects of the upper air passages may cause impairment in the workplace. Most commonly encountered are various degrees of obstruction, which cause dyspnea, which may be profiled under Category C (Pulmonary Disorders).

E.N.T. disease may cause problems of chewing and swallowing that affect a person's state of nutrition. If this occurs sufficiently to affect functional ability in the workplace, the person may be appropriately profiled under Category H (Gastroenterology).

Speech impairment, either from disturbance of primary speech organs or from early complete deafness, may be profiled either under Profile Level 8 (Special Circumstances); or under Category B-G (General Neurologic). The latter should be used if the speech impairment is accompanied by neurologic problems.

Under most circumstances, facial disfigurement will not cause functional impairment, but in unusual situations, it may be profiled under Level 8 (Special Circumstances).

CATEGORY G: OTOLARYNGOLOGY

PROFILE LEVEL	CIRCUMSTANCES	APPROPRIATE WORK ACTIVITY	POSSIBLE ACCOMMODATIONS
1	No past limitation	All	None
2	Past limitation, fully recovered	All	None
3	Slight hearing loss (25-40 dB)*	All but tasks requiring special hearing skills	Use of special devices
4	Moderate hearing loss (40-90 dB)*	Tasks in which limited hearing is required	Use of hearing augmentation devices (amplification, bells, lights, etc.)
5	Severe hearing loss (greater than 90 dB)*	Tasks requiring no hearing unless accommodated.	Use of other signals: bells, lights, computer or written communication or use of signing persons
6	Hearing loss related to noise exposure.	Tasks without significant noise exposure	Require noise protection or re-assignment
7	Recurrent allergic rhinitis, sinusitis, etc., related to work-place irritants/allergens	All but those with identified work-place irritants/allergens	Use of filtering mask, improved ventilation or re-assignment
8	Special circumstances, including loss of taste, smell, or facial abnormality, etc.	Depending on specific problem	According to situation (Change duties or reassignment.)
9	Under evaluation	Depending on situation	Depending on situation
10	Health problem where work activity is inappropriate	None	Review if improved

* All hearing determinations are based upon use of adequate hearing aids, which can be used in either or both ears, whichever is most effective. Profile should be based on compensated hearing in the better ear with use of aids that can be used at work.

CATEGORY H: GASTROENTEROLOGY (G.I.)

Gastroenterology deals with disorders involving the intake, processing, absorption, and evacuation of food and its residues.

While detailed mechanisms of malfunction vary considerably from organ to organ, there are many similar consequences. For example, interference with intake of food or excessive peristalsis may have as common results a serious loss of weight, feeling of unwellness and loss of stamina.

A careful medical history and physical examination, supplemented by ordinary laboratory tests will usually suffice for profiling. The likelihood of change may be indicated on the report form and if such change occurs, a new profile report form should be filled out so that the employer may make appropriate job adjustments.

The following areas are considered: weight; esophagus, stomach and duodenum; small and large intestine; rectum and anus; fistulas; liver; pancreas; stomas and hernias. Some of these may be better profiled by reference to other categories, as, for example, a post-operative hernia is considered under Category M-S (General Surgery).

Weight: Consider overweight under Category M-M (General Medical). Underweight, which may be caused by difficulty in chewing as well as other gastrointestinal disorders, may be profiled according to its effect on strength or stamina.

Esophagus, stomach & duodenum: Consider pain, difficulty in swallowing or obstruction, which often result in weight loss and loss of stamina.

Small and large intestine: Consider pain, diarrhea, obstruction and debility.

Rectum and anus: Consider the same, plus incontinence of feces. Hemorrhoids may limit heavy lifting activities.

Liver, biliary tract and pancreas: Consider nausea, lack of stamina, jaundice, recurrent pain and debility.

Hernias and fistulas may be profiled under Category M-S (General Surgical Disorders).

Infectious conditions may be profiled under Level 8 (Special Considerations) or under an appropriate level under Category M-M (General Medical Disorders).

Suggestions for possible accommodations vary from general decrease in level of physical exertion required or reduction of hours of work to more specific things such as relocation of worksite for better access to toilet facilities, allowing time off for medical treatments, etc..

CATEGORY H: GASTROENTEROLOGY

PROFILE LEVEL	CIRCUMSTANCES	APPROPRIATE WORK ACTIVITY *	POSSIBLE ACCOMMODATION
1	No past limitation	All	None
2	Past limitation, fully recovered	All	None
3	Minimal problems and/or infrequent exacerbations	Heavy, except for intervals	Temporary change of responsibilities at times of exacerbations
4	Slight persisting or recurring problems and/or slightly decreased stamina	Medium	Medium or sedentary in event of recurrences
5	Moderate persisting problems and/or moderately diminished stamina	Medium, with decreased workload	Lifting devices, changing work surface levels, rest periods, limited hours, change in work assignments, special schedule
6	Severe persisting problems and/or diminished stamina	Sedentary	
7	Problems of rectal incontinence	At selected worksites	Locate near private toilet
8	Special consideration	Depending on specific problem	According to situation
9	Under evaluation	Depending on situation	Temporary adjustment
10	Health problem where work activity is inappropriate	None	Review if improved

* See Appendix III for levels of work.

CATEGORY I-G: GENITOURINARY-GENERAL

This category deals with disorders of the reproductive system and of the organs that produce, store and discharge urine. Since reproductive functions of men almost never have any impact on functional ability in the workplace, these have been disregarded and this section focuses primarily on the kidneys and bladder and their appendages, irrespective of gender. However, since the effects of pregnancy and related problems do affect the workplace, a separate category has been used for women's problems, identified as Category I-W (Genitourinary-Women's Disorders/Pregnancy).

Symptoms and signs of impairment of function of the upper urinary tract may include changes in voiding; edema; impairment of physical stamina; loss of weight and appetite; anemia; uremia; abdominal, loin, or costovertebral angle pain; hematuria; chills and fever; hypertension and its complications; abnormalities in the appearance of the urine or its sediment; and biochemical changes in the blood. Renal disease may be evidenced at times only by laboratory findings. Other objective techniques in evaluating upper urinary tract functions are primarily physiologic techniques.

Chronic effects of renal disease requiring dialysis may be profiled under Category M-M (General Medical). Post-operative limitations or complications may be dealt with under Category M-S (General Surgery). Kidney stones may cause complete interruption of work activity for a time.

The bladder and urethra are concerned with storage and delivery of urine. The bladder is a voluntarily controllable reservoir for urine that normally permits the patient to retain urine for several hours. Symptoms and signs of impairment of function of the bladder may include urinary frequency, pain with voiding (dysuria), incontinence, retention of urine, hematuria, pyuria, passage of urinary calculi, a suprapubic mass or pain. Objective techniques useful in evaluating function of the bladder include but are not limited to cystoscopy, cystography, voiding cystourethrography, cystometry, uroflowmetry, urinalysis, and urine cultures.

Increased urinary frequency may have a significant impact on certain jobs requiring continuous attention. Anyone requiring any sort of catheter drainage will require privacy for routine care.

**CATEGORY I-G: GENITOURINARY-GENERAL
(FOR MEN & WOMEN)**

PROFILE LEVEL	CIRCUMSTANCES	APPROPRIATE WORK ACTIVITY *	POSSIBLE ACCOMMODATIONS
1	No past limitation	All	None
2	Past limitation, fully recovered	All	None
3	Mild or intermittent symptoms	Heavy	Task change on occasions
4	Slight or intermittent symptoms	Medium	Use of assistive devices, change in work surfaces, change of tasks, rest periods, limited hours, special schedule or easier access to toilet facilities
5	Mild symptoms with decreased stamina	Light	
6	Moderate to severe symptoms with decreased stamina	Sedentary	
7	Moderate to severe symptoms with increased frequency or incontinence	Variable, with immediate access to or privacy of toilet facilities	
8	Special circumstances	Depending on specific problem	According to situation
9	Under evaluation	Depending on situation	Temporary adjustment
10	Health problem where work activity is inappropriate	None	Review if improved

* See Appendix III for levels of work.

CATEGORY I-W: WOMEN'S DISORDERS/PREGNANCY

Women's disorders applies to any condition directly relating to the female genital tract and to problems associated with the female endocrine milieu. Problems may be primarily anatomic or mainly hormonal. They may be continuous, intermittent or cyclical along with menstrual patterns. Profile levels may be changed from month to month, depending upon response to treatment or the course of a pregnancy.

Women's Genitourinary Problems

Problems of the vulva and vagina are frequently associated with pain, which may be aggravated by certain work activities.

Pelvic disorders affecting the uterus, the tubes or ovaries may involve pain and/or anatomical distortion, frequently requiring surgical removal. Symptoms may include excessive bleeding or menstrual or ovulatory pain.

Pelvic relaxation disorders may result in pain and/or prolapse, which may require sedentary or light work.

Recovery from gynecologic surgery may be profiled under this category according to the degree of limitation, as a special circumstance under Profile Level 8, or under an appropriate profile under Category M-S (General Surgery). The description of women's problems of the kidneys, ureters, bladder and urethra should be profiled under Category I-G (Genitourinary-General).

Endocrine Effects

Since most women are able to and generally do continue their work throughout the month, no specific category has been set up for PMS (premenstrual syndrome). However, in those with documented intermittent problems, Profile Level 8 may be used by the health care provider to identify such limitations as may be appropriate to the individual case. Only rarely should emotional and behavioral problems be considered part of a woman's physical disorders. These should generally be profiled under Category I-P (Psychiatric/Psychologic/Emotional). The menopause is not believed to affect functional ability in the workplace.

Pregnancy

Pregnancy produces temporary changes which affect individuals in a variety of ways. Women should not be limited on the basis of pregnancy alone, but rather on any effects of pregnancy, such as fatigue or back strain occurring only during the pregnancy. If the mother and fetus are healthy and the job presents no greater risks than those found in daily life, the mother can probably work until labor begins and resume work several weeks after giving birth. (Working During Your Pregnancy - Am. College of Obstetricians and Gynecologists).

Obstetrical complications may affect maternal or fetal health or retention of the fetus until term. Work load adjustments may be necessary because of problems with the current pregnancy or because of a history of past obstetrical problems. Among these are preeclampsia, placental abnormalities, and a history of late miscarriage or preterm birth. Restriction of work activity or extended bed rest may be essential. Medical conditions such as diabetes, kidney disease, heart disease, hypertension and back problems may compound pregnancy-related disability. They should be considered in assigning an appropriate functional level. Continuing problems should also be profiled under appropriate categories.

Occupational Exposure

Of great importance to every woman who becomes pregnant is exposure to potential teratogens. Employers should make every effort to allow pregnant women to work in areas safe from such exposure. However, a woman should not be forced to lose her job or her income during gestation. Information about teratogenic effects of chemicals and other substances found in the workplace can be obtained from the Rocky Mountain Center for Occupational and Environmental Health (801) 581-8719 or 581-5056. Other resources are the Pregnancy Riskline (801) 583-2229 and the local health department. Ideally, workplace exposure will be evaluated in a written document. A pregnant employee should be counseled about the risks and may then be given her choice of the following options:

1. Request reassignment for the duration of the pregnancy to an alternate duty area without any known reproductive hazards.
2. Continue working in her assigned area, using all appropriate protective clothing and equipment.
3. Take short-term disability leave for the duration of the pregnancy (may request written approval from the private physicians).

uggestions for Possible Accommodations

is recognized that an employer cannot and should not make gender-specific rules regarding employment, so that these profiles are designed to be applied to individuals depending upon the nature of their health circumstances. Likewise, the listed accommodations are to be thought of as suggestions only, which an employer can use, depending upon the nature of the work involved, the size and variety of his work force and other considerations.

These recommendations are generally consistent with those made by the American College of Obstetrics and Gynecologists. Informational materials for workers and employers are available from them (409 12th St. S.W., Washington DC 20024-2188).

I-W GENITOURINARY (WOMEN'S DISORDERS/PREGNANCY)

PROFILE LEVEL	WOMEN'S GENITOURINARY DISORDERS (OTHER THAN PREGNANCY)	PREGNANCY	APPROPRIATE WORK ACTIVITY*	POSSIBLE ACCOMMODATIONS	
1	No past limitation	--	All	None	
2	Past limitation, fully recovered	--	All	None	
3	Mild or intermittent slight symptoms	Uncomplicated pregnancy, with mild or no symptoms	Heavy	During pregnancy occupational exposure to a potential teratogen requires special investigation, counseling and action. (See narrative.)	Minor flexibility in task assignment
4	Slight persisting problems	Uncomplicated pregnancy with slight recurring symptoms	Heavy with adjustment of task sequence		Adjusted work schedules. Use of assistive devices. Adjust height of work surfaces. Schedule to allow increased rest periods, with adequate facilities.
5	Moderate persisting problems	Uncomplicated pregnancy with moderate symptoms and/or previous difficulties with pregnancy	Medium		Limit hours of duty. Use of assistive devices. Increased rest periods. Access to toilet facilities.
6	Severe persisting problems	Complicated pregnancy or history of past miscarriage, etc.	Light		According to situation
7	Severe problems with increased symptoms with standing, and/or with decreased stamina	Complicated pregnancy, with severe problems and/or past miscarriage, etc.	Sedentary		Temporary adjustment
8	Special circumstances		Depending on specific problem		Review if improved
9	Under evaluation	Depending on situation			
0	Health problem where work activity is inappropriate.		None		

* See Appendix III for levels of work.

CATEGORY J: DIABETES

Diabetes mellitus may affect functional ability in the workplace in the following ways:

- (1) Directly through the effects of fluctuation of the person's blood sugar.
- (2) Through the time required for management of the diabetes.
- (3) As a result of complications which accompany the diabetes, such as visual impairment, lower extremity problems (foot or leg ulcers), cardiovascular problems, etc.
- (4) As a result of fatigability resulting from poor control of diabetes and/or its complications such as kidney or cardiovascular disease.

Persons with diabetes may be divided into two subgroups--insulin users and non-insulin users. Those using insulin may require more time and space accommodations for monitoring blood glucoses, having food available at specific times and taking insulin injections as needed. They are also much more susceptible to developing hypoglycemia (low blood glucose) with its attendant temporary physical and mental disability. Hypoglycemia is the preeminent risk associated with diabetes and its day-to-day management. This risk is far greater for individuals who use insulin injections, although it does also exist for those who use oral hypoglycemic medications.

Proper brain function is totally dependent on an adequate supply of glucose from the bloodstream. If blood glucose is allowed to drop below normal levels, impairment of brain function and its consequences will occur. The avoidance of such dysfunction depends on the individual with diabetes achieving a fine balance of his/her intake of food and insulin, with modifications for stresses and physical activities. Time away from work activity for eating may have to be allowed intermittently and unexpectedly to prevent or treat low blood glucoses, to achieve recovery of full physical and mental function following a low blood glucose reaction, and to monitor blood glucoses or the taking of an insulin dose. The proper timing of food intake is often critical to maintaining metabolic balance. Accommodation should be made to allow intake of meals and snacks at specific times and not to allow them to be delayed by work demands.

Most insulin users can readily recognize the symptoms of lowered blood glucose and can quickly reverse these if allowed prompt access to food and glucose monitoring equipment. However, some individuals who take insulin may have difficulty recognizing the signs of low blood glucose (hypoglycemic unawareness) and therefore, transiently become mentally impaired and at risk to themselves and others in the operation of hazardous equipment or vehicles. Of special note is that physical activity often enhances the blood glucose-lowering effect of insulin.

A specific complication of diabetes is chronic foot ulceration. To allow healing, the area of ulcer must not be weight-bearing. An individual with such an ulcer may otherwise be totally functionally able but must keep his/her weight off the area of ulceration. Accommodation such as working from a sitting position or from a wheelchair may be reasonably expected.

It is recommended that employers of persons with diabetes be given specific educational materials to share with employees as part of a general safety program that respects the confidentiality of the worker's medical record.

If complications of diabetes produce significant impairment, these should also be profiled according to the following special problems:

- Visual impairment - Category F: Ophthalmology
- Heart disease - Category D: Cardiovascular
- Impairment of mobility - Category A-L: Musculoskeletal-Lower Extremity
- Generalized fatigue, weakness or lack of stamina or chronic kidney impairment -
Category M-M: General Medical Disorders
- Recurring episodes of loss of consciousness or control (hypoglycemia) - Category B-E:
Epilepsy and Other Episodic Disorders

CATEGORY J: DIABETES

PROFILE LEVELS	CIRCUMSTANCES	APPROPRIATE WORK ACTIVITY	POSSIBLE ACCOMMODATIONS
1	No past limitation	All	None
2	Past limitation, fully recovered	All	None
3	Non-insulin dependent diabetes, without related physical limitations	Tasks allowing for access to meals/snacks and reasonable regularity of work schedules	Usual physical (space/time) allowances for daily management of condition
4	Insulin dependent diabetes without physical limitations related to diabetes	Same as 3 above. Opportunity for injections.	Same as 3 above
5	Physical limitations due to intermittent or minor loss of functional ability due to hypoglycemia	No tasks involving risk to others* and same as 3 & 4 above	Same as 3 & 4 above. Careful observation and reporting
6	Recent (or repeated) history of severe hypoglycemia with or without hypoglycemia unawareness	No operation of vehicles or tasks involving risk to self or others, and same as 3 & 4 above*	Same as 3 & 4 above. Careful observation and reporting. No extended work away from others.
7	Specific complications of diabetes (such as foot or leg ulcers, etc.) or lack of stamina, etc.	Sedentary tasks or those with very limited standing or walking and same as 3 & 4 above	According to situation
8	Special circumstances	Depending on specific problem	According to situation
9	Under evaluation	At discretion of health care provider	Temporary adjustment
10	Combination of diabetic complications and/or frequent metabolic disarray which does not allow reasonable accommodation to be made in the work place.	None	Review if improved

* See Category B-E (Epilepsy and Other Episodic Conditions) for considerations in evaluating risk.

CATEGORY K: DERMATOLOGY

In general, skin conditions that cause itching, stinging, burning, cracking, fissuring, secondary infection of the skin, or in other ways make the skin too miserable for a person to concentrate and function in the work environment, would be considered a significant impairment depending on the nature of the job. Minor problems such as dryness of the skin, minor cracks and fissures without bleeding or infection, minor irritation with redness and scaling of the skin, may be treated on an ongoing basis without causing interruption of employment. Infectious skin conditions may be profiled under Category M-M (General Medical Disorders).

Skin conditions are an extremely common problem in the workplace, and vary greatly, depending upon the status of the patient and the work conditions under which an employee is expected to perform. As a model for determining an appropriate profile, four groups are listed below, along with three levels of severity for each.

A. Normal Skin with Allergic Reaction:

- I. Minor localized reactions to allergens contacted at work can often be avoided if allergens are not ubiquitous in the work place. (Profile 3) Normal duties may be continued if the allergic reactions on the skin can be prevented by one of the following: (a) protective clothing, (b) avoidance of work areas where allergen is present, and (c) quick treatment of infrequent, minor allergic contact dermatitis.
- II. Moderate involvement of up to 25% of body surface may occur and frequently recur. (Profile 5) Normal duties will be difficult if frequent exposures to allergen cannot be avoided. The following solutions should be explored if normal duty is to continue. If unsuccessful, intermittent duty may be necessary to allow for recovery from allergic reactions. Suggestions include: (a) extensive protective clothing barriers, etc., to avoid contact with allergen, (b) containment of allergen to avoid contact with workers, (c) avoidance of work areas where allergen is present, and (d) reassignment to work areas where allergen is not present at all.
- III. Severe, extensive or generalized allergic contact dermatitis may occur whenever entering the workplace. All attempts at protection or avoidance of exposure within the work place are ineffective or inadequate. (Profile 7) Suggestions include: (a) avoidance of entire facility where allergen is present and (b) retraining for job change and or reassignment within the company to responsibilities where contact with the allergen is virtually impossible.

Example: A person goes to work at a department store, becomes allergic to the fire retardant used to spray boxes in the warehouse. Has severe generalized sustained reaction to fire retardant when stock is brought to retail floor. The eruption clears during vacations and promptly recurs within 24 hours of returning to work.

B. Abnormal Skin with Allergic Reactions:

- I. Minor. Allergic contact dermatitis may exacerbate existing skin diseases. (Profile 3) Where impairment is minimal or localized, normal duty can continue with treatment or protection of the underlying skin disease and allergic contact dermatitis.
- II. Moderate. An underlying skin disease that is aggravated by an allergic reaction may continue to be a problem for a period of time which extends far beyond the allergic reaction. (Psoriasis and atopic dermatitis are examples of diseases where this may be the case.) (Profile 5) Limited duty or intermittent duty may be possible if skin disease and allergic contact dermatitis are well controlled by treatment and or protection from exposure to allergens in the workplace.
- III. Severe generalized skin diseases may be aggravated by exposure to allergens in the workplace. (Profile 7) Temporary absence from work, limited duty or reassignment may be necessary until the skin becomes stable enough for employment to continue.

Example: A worker with psoriasis develops severe allergic contact dermatitis to nickel while working in a metal finishing shop. The allergy causes a severe flare of the psoriasis; however, the allergic contact dermatitis resolves when the worker is off work for at least two weeks and recurs when he returns to work.

C. Normal Skin With Non-allergic Reactions:

- I. Mild non-allergic reaction of the skin may include trauma, burns (chemical and thermal), radiation, scar formation, cracks, fissures, pruritus, burning, paresthesia, vascular changes or any other abnormal temporary or permanent alteration in the structure or normal functions of the skin. (Profile 3) With minimal impairment and or treatment, normal duty may continue.

- II. Moderate skin reactions may cause abnormal sensation, texture, limitation of skin movement. Loss of barrier function of the skin, infection, bleeding, blistering, fissuring or other abnormal condition of the skin that limits the comfort or performance of the worker. Appropriate change of duty may be necessary until the skin returns to normal or near normal.
- III. Severe reactions may result from non-allergic exposures which are temporary. Adequate time for recovery must be allowed as deemed necessary by physician. (Profile 6) Limited or normal duty may be acceptable as recovery progresses. Permanent severe changes in the skin may result in severe permanent impairment (e.g., severe keloid scars on hands or feet, limitation of movement of digits or limbs).

Example: A worker with normal skin works for three months in a kitchen, washing dishes, during which time severe irritant dermatitis develops on hands and forearms due to chronic water and soap exposure. Rash clears completely during vacations.

D. Abnormal Skin - Non-allergic Reaction

- I. A mild non-allergic reaction may permanently alter an underlying skin condition. For example, a burn in a psoriasis patient may exacerbate the underlying psoriasis, thereby complicating the treatment and the worker's ability to return to the workplace. Minimal non-allergic reactions and minimal aggravations of underlying skin conditions may allow continued normal duty with treatment.
- II. Moderate reactions with any of the signs and symptoms noted in C above may require limited duty until the non-allergic reaction subsides and the aggravation of the underlying skin condition is controlled. (Profile 4)
- III. Severe non-allergic skin reactions may be complicated by an underlying skin condition. (Profile 6) As the reaction subsides and the underlying skin condition improves, limited or normal duty may be resumed without worsening either the non-allergic skin reaction or the underlying abnormal skin condition. Severe reactions causing permanent disabilities and/or permanent exacerbation of underlying abnormal skin conditions may prevent return to work.

Example: Worker with atopic dermatitis develops a severe hand dermatitis (dyshidrosis) while working in the produce department of a grocery store. The eruption becomes chronic and is slow to respond to topical medications.

CATEGORY K: DERMATOLOGY

PROFILE LEVEL	CIRCUMSTANCES	APPROPRIATE WORK ACTIVITY	POSSIBLE ACCOMMODATIONS
1	No past limitation	All	None
2	Past limitation, fully recovered	All	None
3	Mild allergies or non-allergic skin reaction (A-I, B-I, C-I and D-I)	Work that limits exposure to allergens or irritants, (protective clothing, etc.)	Allow prompt treatment of recurrences. Use of protective clothing.
4	Moderate non-allergic skin reaction (C-II and D-II)	Work that minimizes exposure to irritants (protective devices)	Change duties or worksite; minimize irritant exposure; protective clothing/devices
5	Moderate allergic skin reaction (A-II and B-II)	Work that eliminates exposure to allergen (protective devices)	Change duties or worksite; protective devices/clothing
6	Severe non-allergic skin reaction (C-III and D-III)	Work that eliminates any exposure to irritants.	Change of duties or worksite; protective devices, etc.
7	Severe allergic skin reaction (A-III and B-III)	Work that eliminates any exposure to allergen.	Consider transfer or training for other work
8	Special circumstances	Depending on specific problem.	According to situation
9	Under evaluation	Depending on situation	Temporary adjustments
10	Health problem where work activity is inappropriate	None	Review if improved

CATEGORY L-M: LEARNING, MEMORY, AND COMMUNICATION

There are many ways to classify jobs or work tasks. Work tasks are arbitrarily divided into those requiring simple or complex mental activity. Further, they are operationally defined to explain the worker's ability in learning, memory, and communication. It is recognized that most jobs require a combination of both simple and complex tasks. Assignment of a profile level should represent a summation of the person's ability to accomplish work tasks.

An individual who is able to perform a complex job has the ability to complete special training or education (on or off the job site), work independently, and adapt to a variety of changes in the workplace. The individual is able to maintain concentration and pace for a full work schedule. The individual is able to communicate in the workplace to fulfill the work assignments. Communication usually involves problem solving.

An individual who is able to perform a simple job is able to acquire the skill with no special training or education, and to master the work task with limited training (usually on the job site). The work task is generally manual and/or physical and requires one- or two-step job instructions. There is no significant change in the work task or environment, requiring adaptation by the worker. Limited communication skills are required, with the communication centered on the training and maintenance of the work task. The tasks are usually repetitive and require no problem solving.

Usual supervision is defined as guidance or instruction from a supervisor, devices to aid in memory, communication, and learning, and arrangement of the work schedule to maintain concentration and pace during the work task.

Functional Profile Levels:

Functional profile levels 1 and 2 are self-explanatory.

Functional profile level 3 defines an individual who is able to learn new, complex job tasks with the assistance of supervisors or devices and perform complex job tasks previously acquired without any special supervision. In addition, the individual is able to learn and perform simple job tasks with usual supervision.

Functional profile level 4 describes an individual who is unable to learn new complex job tasks, even with assistance, but able to perform previously learned job tasks without assistance. The individual is able to learn and perform simple job tasks with usual supervision.

Functional profile level 5 describes an individual who is able to perform complex job tasks, only with special supervision, and learn and perform simple job tasks with usual supervision.

Functional profile level 6 defines an individual who is unable to perform complex job tasks even with assistance, but able to learn new, simple job tasks with adequate supervision.

Functional profile level 7 defines an individual who is able to perform simple job tasks previously learned with usual supervision, but is not able to learn new job tasks.

Functional profile level 8 describes special circumstances, such as those in which an individual is able to perform simple job tasks only with special supervision. This may be also used for individuals who are expected to move to higher levels if given the opportunity.

Individuals with impairment in learning, memory, and communication may also display impaired judgment, impulsivity, impaired concentration, distractibility, abnormal behaviors, and psychological impairments. These associated features should also be considered in establishing the profile level. Ability may fluctuate in relation to the effects of medication, alcohol or drug abuse, emotional stability, stress, fatigue, etc. Therefore, a person's habits, stability, and related impairments should be carefully considered in establishing the overall functional level. The effects of age will vary on an individual basis, and may also be considered.

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

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

