ANY STUDY of job-safety and health-work standards for women must start with the demolition of myths and half-truths, and the first of these is that the frail sex is by nature frail, and that men are strong and durable. There are now, according to the Census Bureau, 1,381,000 more females than males in the United States; this excess is more than double the 1950 figure, 600,000. Life expectancy for women is 73 years, for men, 67.

Although disease is largely responsible for reducing male population below the female, it is also true that more men than women die as a result of accidents. According to Government mortality figures, more men are killed by falls from ladders, falling downstairs, being struck by lightning, alcoholism and as pedestrians by cars. The only type of accident in which women take the lead is falling on the same level.

Although these statistics include home accidents, they raise the question as to whether the problem of industrial accidents to women can be completely dismissed. After all, the main reason fewer job accidents involve women than men is that twice as many men work and that most women are employed in non-hazardous occupations. What evidence there is indicates that a man and a woman working on the same job are equally likely to be injured. Moreover, women are a growing portion of the work-force. Some of them are entering tough occupations once monopolized by men where work injuries are especially likely to occur.

It should also be pointed out that today women are a large part of the group starting work for the first time, and new workers are largely unfamiliar with industrial hazards. Such new women employees need safety orientation, as do new male employees.

The "frail sex" myth says that women tire more easily than men and so are more liable to work accidents. But it all depends on what is being compared. Of course a woman may be more fatigued on the job than a man if she is doing her own housework, plus the job. Also, the average woman weighs only 85 per cent as much as the average man and has only 60 per cent as much strength. For the same reasons, she cannot reach as far, and on the average her grip is not as strong.

People planning machines and job methods have usually had men in mind. The foreman who finds his women workers complaining about backaches, sore arms, weariness and the like should study the jobs carefully and make sure they have not been badly set up. Good engineering is vital and can eliminate much fatigue, says the National Safety Council. M. H. Kronenberg, writing in the Journal of the American Medical Association, suggests that, when women replace men, management consider:

1. Extensions of levers on machines, tools and equipment, to produce the same results with less effort
2. Use of lighter-weight and longer wrenches
3. Suspensions and counter-balancing of heavy hand-tools where lighter tools cannot be substituted
4. Lowering of work tables, or raising the floor level, to fit the height of women operators
5. Readjustment of machine guards because women's hands are smaller than men's
6. Positioning of material so that it will reduce the number of body motions, eliminating the need for lifting heavy objects and for long reaching

WORK that requires workers to stand in awkward positions, to reach above their heads for tools, or to turn switches on or off, or keeps them making the same motion all day without rest periods, will be excessively tiring for either women or men.

Where heavy objects must be lifted, careful job analysis is needed to ascertain whether the lifting involved in a particular job is too much for the woman worker. It is hard to set a definite limit, since the strength of women varies greatly. Many heavy persons do not have the strength of much smaller people—particularly if they are not accustomed to physical labor or physical exercise. The safety man's best approach is to set job standards for each woman in his department in consultation with the company physician, aided by the plant engineer and department foreman, the Safety Council recommends.

The myth about women and work injuries extends to occupational diseases. One is that women are more subject to dermatitis (skin disease) than men. This is not true; susceptibility depends on the type of skin of each individual and the particular irritant to which he or she is exposed. It is true that pregnant women seem to be more susceptible than other workers to the effects of benzol and lead, which may produce anemia, and to some other chemicals. Women's altered metabolism during pregnancy may make them especially vulnerable to substances that can adversely affect the blood-forming organs, the liver and kidneys, according to the Women's Bureau of the U.S. Department of Labor.

Pregnancy places a definite limit on the ability of women to do physical work, since a pregnant woman tires more readily, has poorer balance, and is unable to respond normally to physiological demands of heavy toil.

This article is reprinted by special permission from the July, 1957, issue of Industrial Bulletin where it appeared under the title, "Safety for Women in Industry." It is based on studies conducted by the office of the Industrial Commissioner of the state of New York, Isador Lubin.