Professor of Sociology of Columbia University, C. Wright Mills, defines the issue in this way:

No moral endeavor, no political orientation, no human study that does not pay close attention to man at work, can possibly be adequate for our time. For work is affected by and in turn affects all that man is and all that he might become. The question we must ask of any society or of any social program is what kinds of men and women does it select, encourage, create? And, in terms of this human evaluation, the most important question we can ask is whether work is a void in which men sacrifice themselves or whether work is a central feature of a style of life in which man may realize himself. . . .[4]

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SOME OBSERVATIONS ON OCCUPATIONAL DERMATOSES

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Incidence of Industrial Skin Diseases

While there are at present no reliable statistics on the incidence of occupational dermatoses, their frequency is undisputed. Indeed, in World War II evidence indicates that there were more skin casualties than all other battle casualties in this very specialized occupation of soldiering.

In England, a three year study done between 1930 and 1932 inclusively, more than 72 per cent of all occupational diseases were found to be industrial or occupational dermatoses.

Reports from the compensation boards in seven states in this country indicated that 65 per cent of all compensible cases were occupational dermatoses. In a fashion more understandable to those of us accustomed to cost and taxes, this means an estimated loss of more than ten weeks per year with an annual cost of approximately one million dollars. This, in itself, a staggering figure.

Anatomy and Function of the Skin

With these brief statistics, it is well to ask something of their body area, so easily disposed to such great measure of damage. And *again* it is felt that a most superficial look at the anatomy and function of the skin, as it is related to this question, is indicated especially for those not related to the medical sciences.

It is not always realized that the skin is one of the most important organs of the body. In its embryonic development, it represents the first of the three primary or basis tissues formed, the ectoderm. And from this ectoderm the largest sensory organ is developed, the brain. So the skin is not only a prologue to the brain, but remains the next largest sensory organ.

The skin is an organ, a very complex organ, constituting about one sixteenth of the total body weight. It contains, within its comparatively thin structure, muscles, blood vessels, nerves, glands, specialized cells such as those that produce pigment and appendages such as nails and hair.

With over-simplification, we can divide the skin in two major layers—an inner layer, called the corium and an outer layer called epithelium. The inner layer is tough, elastic and resilient, and its chief function

is to protect against normal and everyday injuries the more susceptible inner organs; and this is the skin layer which, on tanning, produces leather.

The epithelium, or outer layer, likewise protects by means of its outermost, insensitive, cornified layer, its oil gland and sweat gland secretion, and by means of pigment content. These elements are present in all normal skin and vary only by degree or quantity.

Of the many functions of the skin, the following are of particular pertinence to this discussion:

(1) It protects the under-lying tissues of the body by the physical means of resilience and elasticity.

(2) It protects by means of the relatively insensitive outer "horny" layer of the epidermis by its resistance to noxious substances.

(3) It protects the integument from actinic and other physical radiations by means of its pigments.

(4) It receives and transmits sensations of many types to the central nervous systems such as pain, heat and cold.

(5) It regulates body heat so that extremes of external temperature changes can be neutralized.

(6) It secretes water and some waste products.

(7) Finally, it has a small role in respiration and gaseous interchanges.

All of these functions are constantly being modified by internal and external influences designed to allow man to maintain some constancy in an ever changing environment.

Historical Background of Industrial Diseases

From a historical point of view, injuries suffered by the skin were known but not favored in medical writings for many years. Not until 1700 when Ramazzine published his *Treatise* was formal recognition achieved and many of his observations still hold true today.

In 1775, Percival Potts noted and described the chimney sweep cancer of the scrotum, as previously mentioned by Dr. Abrams.

Not until the early part of the nineteenth century were added interests and contributions made to this subject. Then English, French and Germans began to describe the occupational dermatoses of their era.

Not until World War I did American dermatologists begin their prolific and significant studies. At this time there was an intense revival and expansion of the chemical industries and many new areas in the field of industrial dermatoses had to be explained. These new areas are still being met with even today.

In 1928, the United States Public Health Service organized the Office of Dermatosis Investigation, which is exclusively concerned with occupational and other forms of contact dermatitis. This, in part, has led to formulation of laws in the majority of states designed to compensate workers for occupational diseases.

Predisposing Causes of Occupational Diseases

It is almost impossible to classify clearly all the professional and occupational damages to which skin is subjected. The new chemicals, the complexities of manufacture and the wide usages and the resultant chemical products increase this difficulty.

However, certain factors remain constant. I should like to summarize some of these among the predisposing factors that play an important role:

First—Illustrating the protective role of epidermal pigment, it is an accepted if not proven fact that negroes are less susceptible to certain skin irritants than other races. Thus they are the choice employees as grinders and dyers in dye factories, where irritating dusts as well as dyes are the major hazards. This is likewise true where solvents are the irritating factor as in dry-cleaning establishments. However, oils and their by-products are the chief irritants of negroes and an increase in dermatosis occurs in negroes chiefly in the form of oil acne.

Secondly—Types of skin vary markedly in individuals as well as in races. The thin, blond-skinned individual has trouble obtaining employment in those industries that bring them in contact with potential irritants and, I may add, if those industries' pre-employment examinations are adequate.

Workers with thick oily skin can tolerate the action of fat solvents, such as soap,