

were real and how many were pretenses on the part of workers attempting to gain relief from onerous work. Stomach disorders were notoriously difficult to confirm, making this the ideal bodily organ from which to spring a phony illness. A great deal of research went into how to determine when such complaints were real and when the worker was "dissimulating." Ernst W. Baader, director of Berlin's prestigious University Institute for Occupational Disease and a Nazi party member since 1933, accused physicians and insurance officials of collaborating in "swindles" of this sort to keep workers off the job.²⁴ Many physicians were convinced, however, that the increase in stomach disorders was real and a consequence of the increased pace of work. Initiatives were launched to make the work environment more comfortable; one outcome was the DAF's ocean cruise vacations for workers, organized as part of the *Kraft durch Freude* (power through joy) movement.

The guiding principle informing many of these measures was the maintenance of a strong and healthy workforce. Maximization of labor potential had always been a focus of occupational medicine, but in the Nazi era keeping workers on the job was elevated to the be-all and end-all of the discipline. Calling in sick became a rather precarious process, requiring medical approval and—if any time was involved—medical certification. Physicians were instructed to approve such requests only in exceptional cases, and only if the worker in question was clearly unable to work. After the onset of the war, when foreigners were doing much of the work in German factories and on German farms, a work-threatening illness could result in a life-threatening transport to a concentration camp.

The focus on productivity helps us understand how it was that, though injuries were up in the early years of the regime, the fraction of workers receiving compensation was down—from 14 percent in 1933 to only 9 percent in 1936. The number of industrial workers employed in Germany increased dramatically in these early years—by 2.25 million—but the number obtaining pensions for work disability actually fell, from 633 per year to only 532.²⁵ Nazi leaders wanted a healthy workforce, but they were not always willing to help an injured worker.

It is in this context that the "progressive" measures of occupational medicine in the Third Reich must be situated. Nazi leaders in many instances took steps to improve workers' health and safety, though not everyone was equal when it came to obtaining help. Being sick or injured became more and more dangerous. Inability to work could itself become a death sentence, especially if there were doubts about your "racial fitness."

X-RAYS AND RADIATION MARTYRS

Though X-radiation was not discovered until 1895, by the turn of the century the "wonder rays" had already found uses in hundreds of clinical settings against every imaginable kind of illness. X-rays were used to combat hysteria and infertility; X-rays were administered to children, for no other reason than to precipitate hair loss so that other diseases (ringworm, for example) could be treated. X-rays and radium implants became fashionable tools in cancer treatment, joining surgery in the therapeutic arsenal (chemotherapy, the other branch of the therapeutic triad, would not become popular until the 1950s). A 1937 review suggested that radiation had already surpassed surgery as the favored treatment for many malignancies.²⁶

Knowledge of a cancer hazard from X-rays and radioactive sources—as opposed to burns, hair loss, and other symptoms of acute radiation poisoning—emerged in the first decade of the twentieth century.²⁷ Skin cancers of the hand were the first to be noticed (especially among X-ray technicians, who often tested the rays with their hands); these were followed by leukemias, bone cancers, and cancers at various other sites. German physicians published evidence of X-ray-induced breast cancer in 1919, of X-ray-induced uterine and cervical cancer in 1923, and of X-ray-induced bone cancer in 1930.²⁸ By the end of the 1920s there was a sizable scientific literature on radiation carcinogenesis, including a large body of work based on animal experiments.²⁹ X-rays even began to be blamed for the upsurge in lung cancer rates: the chest was rapidly becoming the most often X-rayed part of the body (the