

**Books Toxic corporate crime**

**D**eceit and Denial tells the story of public-health catastrophes in the manufacture and marketing of products by the lead and chemical industries, and offers the insightful analysis of historians who have long familiarity with industrial hazards. Gerald Markowitz and David Rosner describe how workers and the public

**Deceit and Denial: The Deadly Politics of Industrial Pollution**

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were subjected for decades to hazards through a smokescreen of advertising, withholding of industry data, use of industry-controlled standards groups and trade associations to lobby legislatures and influence policies of governmental agencies, intimidation of independent researchers, systematic methodological criticism of adverse medical reports, pressure on hospitals to withhold evidence of industrial poisoning, sponsorship of scientists to churn out unsupported claims that a certain amount of lead in our bodies is normal, and similarly unsupported assertions that leaded gasoline was not polluting the environment.

Internal corporate documents produced in US civil litigation provide

much of the remarkable inside story recounted here. The lead and chemical industries virtually controlled the relevant medical research by default until the 1970s. This was before the enactment of laws that created the US Environmental Protection Agency, the Occupational Safety and Health Administration, and the National Institute of Occupational Safety and Health (NIOSH) in 1970. In this "Stone Age" of industrial medicine and hygiene, there was little governmental funding for independent research on toxic substances. Vinyl chloride gas was widely used to make plastics and as an aerosol spray propellant. As experimental evidence of its carcinogenicity emerged from industry-sponsored research, the companies withheld the information from NIOSH in 1973, only to disclose the next year that angiosarcomas of the liver were by then occurring among vinyl-chloride workers, as well as in the experimental studies at levels well below the prevailing workplace exposure limit.

The authors bring experience up to recent years by describing the gathering force of the environmental justice movement, which joined the protests of community residents with traditional and activist environmental and civil rights groups, labour activists, university law professors and students, and officials



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in the federal government committed to social justice.

The book ends by noting some of the toxic threats now receiving more attention—reproductive abnormalities, neurotoxicity, endocrine disruption, immunotoxicity, behavioural effects. It observes that EPA is badly under-financed and lacks even basic toxicity information on most of the high-volume chemicals now in use. This ably written book makes a strong case for a precautionary approach toward the regulation of toxic hazards

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**Discarded diagnoses Neurasthenia**

**I**f sthenia (*Lancet* 2003; 361: 885) was hard to say, neurasthenia trips off the tongue. Perhaps the most permanent legacy of John Brown's desultory career, neurasthenia was not carved out from asthenia until almost a century after his death. Two American physicians, E Van Deusen and George Beard independently named this new disease in 1869. Van Deusen got there first, but he practised in Kalamazoo, Michigan, and Beard, a fashionable New York neurologist, made the term stick.

Neurasthenia would have conjured up a precise meaning to those who first encountered it: nerve weakness. At a time when notions of electricity and energy were permeating neurophysiology, neurology and psychiatry, the idea that a patient's nervous system was operating at less than an optimal setting, made good sense. Its primary cluster of symptoms, tiredness, weakness, dyspepsia, was to be found, Beard believed, in thrusting,

successful, urban Americans. Indeed, he initially thought it a peculiar disease of Yankee civilisation.

Under Beard's benign tutelage, the diagnosis eventually enjoyed a lively export trade. The British reacted against Beard's perceived social gaucherie, during his visit there in the early 1880s, but French, German, and other Continental neurologists and alienists were more positive, and for more than a generation, neurasthenia was a diagnosis à la mode. It explained so much, in so many patients. But then it ran into problems mostly because it explained too much, too easily.

Neurasthenia was always primarily a functional diagnosis, and thus easily relegated to the psychiatric sphere. Psychasthenia, although more difficult to say, also enjoyed a postBeard existence, and pointed towards the energy deficit as psychological rather than physical. By the middle third of the 20th century, some of neurasthenia's cultural baggage no longer

seemed to resonate. Beard's class and gender distinctions also muddied later waters.

Despite these and other conceptual and scientific difficulties, neurasthenia did not go away. It continues to enjoy a marginal life in international classification schemes, and is still a common diagnosis in China. Its relation to modern fatigue syndromes is also an intriguing historical puzzle. Did Beard describe a disease that we now call chronic fatigue syndrome, and which had intervening diagnoses of atypical polio, chronic Barr-Epstein virus disease, chronic Brucellosis, yuppie flu, and myalgic encephalomyelitis?

Maybe he did, and maybe he didn't. But what Beard's diagnostic category did was highlight the general, non-specific, non-localising dimension of disease, which is culturally sensitive, but will not go away.

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