

per hour, and that there are currently 100 million automobiles on American highways. Using the logic of the government report, one would conclude that there will be 10 million excess deaths as a result of driving at high speeds. This analogy is not as farfetched as it might seem, since the risk of developing a tumor clearly decreases with decreasing exposure to a carcinogen, just as the risk of dying in an automobile accident clearly decreases with decreasing speed.

The investigators have also rather sloppily equated deaths with incidence, even though the number of deaths resulting from a tumor is clearly only some fraction of the incidence, depending on the tumor. In short, the HEW projections are clearly exaggerated.

The dispute about deaths resulting from asbestos exposure is more difficult to resolve. Fairly good data indicate that some 4.5 million people were exposed to asbestos in shipyards during World War II and that another 3.5 million to 6.5 million people in other occupations have been exposed. Some 4 million of that total are believed to have had heavy exposure. Epidemiological studies of heavily exposed workers who have already died indicate that 20 to 25 percent died from lung cancer, 7 to 10 percent from mesothelioma, and 8 to 9 percent from gastrointestinal cancers.

Of the 4 million heavily exposed workers, the investigators thus expect at least 1.6 million to die from asbestos-related cancers, or about five times the number that would be predicted from the normal incidence. They predict that those exposed to lesser amounts would have about one-quarter of this risk. That would bring the total number of asbestos-related cancers to a range of 2.0 to 2.3 million. Since most asbestos-induced tumors are manifested over a period 30 to 35 years after exposure, the number of excess cancer deaths associated with exposure to asbestos would be between 58,000 and 75,000 per year. Such numbers, the investigators say, would amount to 13 to 18 percent of all cancer deaths in the United States.

The AIHC report disagrees with the government report on several specifics. The government investigators, for example, assume that about 1 million of the 11 million exposed workers would be dead by now. The AIHC investigators say standard mortality rates would predict that some 2.5 million of the shipyard workers would have died by now and a substantial number of the other exposed workers also would have died. If the increased risk of asbestos-induced cancer used by the government investigators

Regulators Defend Their Turf

Environmental and health and safety regulation has been on the defensive ever since last winter when the Council of Economic Advisers (CEA) and the Council on Wage and Price Stabilization (CWPS) first zeroed in on it as a contributor to inflation. Thus far, however, the regulatory agencies, which include the Environmental Protection Agency (EPA), the Occupational Health and Safety Administration (OSHA), and the National Highway Traffic Safety Administration (NHTSA), have held their own fairly well against proposals that could have sharply reduced their authority to issue regulations imposing new costs on industry. This was again evident on 24 October in President Carter's special message to the nation on inflation. The new Regulatory Council announced by the President for the coordination and review of proposed new regulations is mild medicine compared to what some White House advisers had first proposed.

Observing that regulation should not be allowed to place unnecessary burdens on the economy, the President noted that earlier this year he had called for review of existing regulations from that standpoint and thorough cost-benefit analysis of proposals for major new regulations (*Science*, 14 July). Now, he said, the new Regulatory Council, to be made up of representatives of the regulatory agencies themselves, will "coordinate regulations to prevent overlapping and duplication" and maintain a "unified calendar of planned new regulations."

All of the relevant units within the Executive Office of the President, such as the CEA, CWPS, the domestic policy staff, the Office of Science and Technology, and the Office of Management and Budget (OMB), will have a chance to review the regulatory calendar and to seek to modify any proposed regulations seen as needlessly burdensome. But, significant as this may be, it is a far cry from what Charles L. Schultze, chairman of the CEA, had proposed. Schultze advocated having the regulatory agencies submit proposed regulations to the OMB each year for a centralized process of review and clearance.

This was a watered-down version of the "regulatory budget" concept which Schultze and others have been suggesting for some time as a desirable, if admittedly difficult, goal to work toward in the future. In its purest form, this concept calls for a process of review and approval for regulations that is closely analogous to the fiscal budget process. That is, the OMB would establish limits agency by agency as to the regulatory costs to be imposed in any given year and the agencies would have to stay within them. This "budget," like the conventional budget, would ultimately be submitted by the White House to Congress for its review and approval.

(As Schultze has acknowledged, the difficulties of carrying out so ambitious a process or anything approaching it would be formidable. For one thing, predicting the costs that proposed new regulations would place on industry and the economy would not be easy.)

Early in October, the Council on Environmental Quality organized a meeting of leaders of the regulatory agencies to discuss what was perceived as a vigorous campaign being waged from a number of industry and governmental quarters to constrain the regulatory process in the name of combating inflation. Subsequently, as these leaders began working closely with the White House staffers who were preparing the President's forthcoming inflation message, they found the Schultze proposal to be front and center.

Alarmed at this, the agency leaders, with Deputy Administrator Barbara Blum of the EPA taking the lead, put their minds to work preparing a counterproposal. The result was the Regulatory Council proposal which ultimately carried the day. According to sources at the CEA, this proposal was agreed to by Schultze himself as an acceptable compromise.

The Regulatory Council is regarded by Blum and others as a kind of "regulatory clearinghouse," and just what this will mean in practice is sufficiently uncertain as to cause some uneasiness in the environmental community. Nevertheless, leaders of the regulatory agencies are taking comfort in the fact that the review of proposed regulations has been entrusted largely to a body which they will make up and run themselves.—LUTHER J. CARTER