

## Letter from . . . Chicago

### Lives for votes

GEORGE DUNEA

How far should a government meddle in people's private lives? This question, which has exercised great philosophical minds, becomes explosive when it touches on America's love affair with the automobile. Talk of compulsory seat belts and otherwise rational people who would not dream of objecting to restraints on aeroplanes become agitated and tremulous. Pulses quicken, the adrenals discharge, and new spikes appear on the electroencephalogram. And now come new laws for testing for alcohol in the blood, perceived by many people as yet another invasion of our privacy, a violation of the constitution, the Nuremberg code, and the Helsinki declaration.

The other side of the coin is that in early December a drunken driver, previously convicted for driving under the influence, lost control of his car and ploughed into a group of high school students. "There was blood and twisted bodies everywhere," said one bystander, "it looked like a bomb had exploded"; and at least six students were killed or seriously injured. So on this sobering note I report that one year ago Illinois passed a law, effective from July 1985, requiring drivers and front seat passengers to wear seat belts or face a \$25 fine. Based on the experience of 34 other countries, this law was expected to save 300 lives and prevent 43 000 injuries in its first year. While letters and calls against the measure outnumbered those for it by two to one, Chrysler's chairman, Lee Iacocca, called the governor urging him to sign the Bill, and the automobile makers generally came out in support of the law, worried about federal regulations mandating the installation of airbags unless states representing two thirds of the US population enacted mandatory seat belt legislation by April 1989. But conservatives vowed to continue the fight against what they called the nickelling and diming of our liberties; and it was remembered that in 1969 the Illinois Supreme Court overturned a law requiring motorcycle riders to wear helmets on the grounds that the state cannot force people to protect their own safety.

Doctors mostly supported the Bill. They wrote in about this "deadly epidemic" that was claiming so many lives, the automobile having become a major cause of death, killing over 42 000 people in 1983 and costing the taxpayers some \$500 000 for each serious accident. They cited studies indicating that seat belts would virtually eliminate neck injuries as well as reduce head injuries by 80% and chest injuries by 50%. Many deaths, they explained, were caused by the passengers colliding with each other or with the interior of the car. Being thrown out of a car increased the odds of dying 25 times, the risk greatly exceeding that of being trapped in a burning or submerged car. It was also calculated that seat belts were the cheapest form of public health intervention in terms of lives saved per dollar spent.

Also in favour of the Bill were most newspapers. One editorial, entitled "Thank you governor," explained that 14 states had passed

similar laws and that Bills had been introduced in most other state legislatures. Already the new laws have taken effect in New York, New Jersey, and Illinois, with New York reporting a 30% decline in fatal accidents. But in Illinois the doctors were put on the spot because the law provides for exemptions on medical grounds, causing a flood of people wanting to be excused because of obesity or even because they thought that seat belts would cause rashes or breast cancer. One doctor is now being sued for malpractice because his patient, with chronic bronchitis, died in a collision after being granted an exemption when he claimed the belt pressed on his chest.

So far the statistics in Illinois show that the number of road deaths at first fell but increased again in October and November. A traffic expert said she doubted that the police were enforcing the law. But a political candidate for the position of governor announced that he would repeal the law if elected, whereupon the present governor called him a political coward who had "flip-flopped" on the issue and was trading lives for votes. The final blow may well come from a 25 year old grocery clerk, mother of five, who was displeased with the tone of the policeman who gave her a ticket and decided to have her lawyers test the constitutionality of the seat belt law in the Illinois Supreme Court. While the judges are pondering over this issue others are arguing about seat belts on school buses, which are required in Chicago but not in the suburbs and are thus interfering with field trips for schoolchildren and hurting attendance at the city's eight museums.

#### Police state tactics

Turning to alcohol and driving, we find another political candidate actively trying to raise funds from breweries and liquor associations to fight what he calls the present administration's police state tactics. New laws, supposed to place Illinois "in the forefront of the crackdown on drunken drivers," mandate automatic suspension of a driver's licence for three months for the first offence and for one year for the second. Drivers refusing to have their blood alcohol level checked will be disqualified from driving for six months. Young drivers, who cause many more accidents than their numbers should account for, will receive a specially colour coded licence to identify them as a high risk group. Already in Illinois persons under 21 may not buy or be served alcohol. This summer the police placed road blocks on the 200 mile "bloody border" from the Mississippi to Lake Michigan to arrest intoxicated teenagers who were regularly crossing into Wisconsin to take advantage of the drinking age of 19 in that state. A new federal law, also sponsored by an Illinois congressman, will withhold 10% of federal highway funds to states failing to raise the legal drinking law to 21 by 1988. New Illinois laws also provide for swifter hearing of drunken driving cases—within 45 days of an arrest at present and within 30 days by 1987. In addition, the amount of damages businesses serving alcohol may have to pay to injured victims has been raised. All this reflects the growing concern about accidents caused by drunken drivers. "Few crimes are as heinous as recklessly driving a motor vehicle under the influence of alcohol," said the governor of Illinois recently.

The statistics, indeed, show that traffic deaths, having declined from an all time high at the time of the 1972 oil embargo, have now bounced back to about 42 000 a year. About half are related to alcohol, often being caused by drivers with previous convictions for drunken driving. Yet authorities are hampered by difficulties in deciding who is unfit to drive. Individual tolerance varies, some people driving unsafely at 30 mg/100 ml, and what may matter more is the alcohol level in the brain. There is also some debate about how the alcohol should be measured, from what specimens, and how the results should be expressed. Many states have a legal limit of 0.1%, but some do not specify if this is per weight or, as is more usual, per 100 ml. Interestingly, police in one Chicago suburb use a more clinical approach. They conduct a heel to toe walking test, ask drivers to stand stork like on one leg for 30 minutes, and attach particular importance to the presence of horizontal nystagmus. Not having attended courses at the National Hospital for Nervous Diseases, Queen Square, they know nothing about nystagmoid movements or about having to stay within the field of bilateral vision. They none the less claim that their tests are 83% accurate in predicting levels above 100 mg/100 ml and have somehow calculated that for each 100 arrests for driving under the influence they save one life.

But saving lives may require looking beyond the automobile. In the greater Chicago area one third of pedestrians killed in traffic accidents and one half of drowning victims have been found to be intoxicated. Alcohol had a role in half of the county's gunshot wounds and two thirds of stabbings. One third of fire victims have excessive alcohol levels; almost 20% of bicyclists killed in accidents were found to be intoxicated; and 75% of boating accidents are alcohol related, causing several states to pass drunken boating laws. Alcohol is a traditional cause of train accidents—such as in 1982 in Louisiana, where a fire forced the evacuation of a town's 2000 residents when a drunken engineer and brakeman caused the derailment of a 101 car freight train carrying toxic chemicals. In 1979 a federal study found that 5% of workers surveyed at major train companies came to work inebriated. Recently in California there was also an arrest for horse riding under the influence, a man

being so drunk that he kept repeatedly falling from his saddle, then galloping away when the police officer turned on his siren.

### Return to prohibition

Yet there are signs that alcohol consumption is declining and that America is growing increasingly antagonistic towards drinking in excess. It is almost a neoprohibitionist movement, very bothersome to an industry that depends more on heavy drinkers than on the two drinks a day people. In the United States 15% of all drinkers consume 50% of all alcohol while drunk. Consumption of wine and beer is still increasing but the consumption of hard liquor has fallen, possibly because of demographic changes, in that for the first time in years the number of men aged 18-24 is decreasing. Also hurting the industry has been the fitness movement—and indeed it is hard to jog with a hangover. In addition, there have been campaigns in schools, moves against advertising, stricter enforcement of laws against drunkenness, and in some states tough liability laws holding bar owners liable for accidents resulting from alcohol abuse on their premises or for continuing to serve obviously intoxicated people.

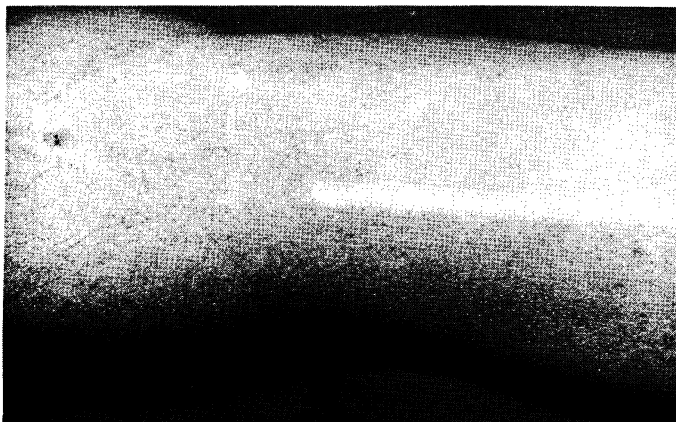
How far this antialcohol mood will go is uncertain: probably not very far, but enough to worry the guardians of our freedom. Will there be another prohibition? Will there be a ban on coffee now that a cardiologist thinks that drinking more than three cups raises the risk of heart disease fivefold? Already three Chicago suburbs have banned handguns. A southern legislator wants to make it illegal to blow one's nose in public, saying it is a disgusting habit spreading germs. The American Medical Association is conducting a crusade against boxing. Will they also ban football, racing, hockey, mountain climbing, gliding, and ski jumping? No wonder some people, including doctors, think that George Orwell's 1984 is closer to reality than ever. In this they are joined by some of the right wingers, who advocate ownership of machine guns and would limit the role of government to issuing commemorative stamps. They believe that all this pampering and coddling will not make us live longer, but they suspect that it will make it seem longer.

## CLINICAL CURIO

### White line sign: indicator of hazards of peripheral vasopressin infusion

Arginine vasopressin is a powerful vasoconstrictor used for treating bleeding oesophageal varices.<sup>1</sup> Serious side effects include constriction of coronary arteries and cutaneous gangrene infusion sites.<sup>2</sup> While investigating the effect of vasopressin on skin and skeletal muscle blood flow, we observed an unreported vascular phenomenon.

Eight male volunteers, mean age 30, were studied at 25°C. Vasopressin, 20 U in 250 ml saline, was infused at 2.0 U/h for 90 min into a cephalic vein.



Vasopressin white line sign: blanching of skin overlying cephalic vein during its course in superficial tissues. Line begins several cm beyond infusion site.

Seven subjects developed blanching of the skin producing a raised white line over the vein appearing 60-90 min after infusion and lasting 1.5-2.5 h (figure). Skin blood flow was estimated with a Periflux laserdoppler flow meter (Perimed, Sweden), and readings were mean 0.46 (SEM 0.06) V overlying the cephalic vein compared with 0.79 (0.09) V ( $p < 0.005$ ) in adjacent areas and the unaffected arm.

The appearance of a white line overlying a vein infused with vasopressin shows its potency as a vasoconstrictor. It implies that vasopressin crossed the vein wall, perhaps by increasing vascular permeability, and preferentially constricted small vessels.<sup>3</sup> This effect, together with the procoagulant state induced by vasopressin,<sup>4</sup> may predispose to cutaneous gangrene. Thus one tenth the therapeutic dose of vasopressin produces profound local vasoconstriction even in normal subjects. Vasopressin should not, therefore, be administered by peripheral infusion, but, when unavoidable, the white line sign may be a valuable indicator of incipient skin necrosis.—P G WILES, lecturer, P J GRANT, research fellow, J A DAVIES, senior lecturer, Leeds LS1 3EX.

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