PUBLIC SAFETY

You Can Cheat Death

If you are a Bohemian type of motorist, beware of yourself! These individualists have more than their share of highway accidents.

By ALLEN LONG

➤ DEATH PLAYS a tricky game of tag with you on the highway. But you can do a little commendable cheating if you know the rules.

First, you must know whether you are the "Bohemian type" of motorist. You should be extremely cautious behind the wheel if you are. This individualist is much more apt to be caught by Death, according to a study at the Iowa State College Driving Research Laboratory.

"Persons showing Bohemian characteristics have many more accidents than can be expected by chance," reports Virtus W. Suhr, who conducted the study under supervision of Dr. A. R. Lauer, psychologist and the laboratory's director.

The Bohemian type of motorist is the man who flaunts conventions, keeps owlish hours and does not conform to the accepted rules of safety, Mr. Suhr explained.

The study also revealed that swell-headed persons have broader shoulders for Death to tap. The same is true for those who are immature, who have a suspicious nature and who are under nervous tension.

High-Accident Drivers

Persons involved in accidents were found to visit their doctors frequently. They also seemed to be less practical-minded. Their cars often were not in tip-top condition. Furthermore, this group as a whole had a higher absentee record from work and learned to drive later in life.

Generally speaking, the study showed that "high-accident drivers" took advantage of their parents with respect to use of the family car. They often favored "ticket fixing." They belonged to fewer clubs and lived in the city during their younger days.

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If any of these "shoes" pinch your feet, you had better see about correcting the fit.

That is one way you may cheat Death.

Research at the University of California by Drs. Heinz Haber, Robert Brenner and Slade Hulbert has turned up a few tips to use in the approaching vacation season.

Plan your trip so that the first day's destination is not too far away. If you make your destination ahead of time, think twice before deciding to drive on to the next "logical" stopping place. The scientists say they believe persons unwisely decide to go too far after reaching the first day's stopping point ahead of schedule. Fatigue soon overtakes them and they become easy prey for Death.

They react to skids and emergency stops more slowly than they should. This is particularly true if the driving has been steady with few pauses for refreshments or sightseeing.

Monotonous driving can induce "road hypnosis." When this happens, the driver may suddenly see an emergency on the highway and jam on his brakes or swerve to miss it—only to find that what he "saw" was actually a figment of his imagination, a sort of mental mirage.

You may cheat Death by breaking your trip into easy legs and by avoiding drowsiness. It is reported that 40% of the fatalities on limited access highways is due to drivers falling asleep!

Paul W. Miles, a St. Louis, Mo., physician, cautions about wearing tinted glasses at night to cut down glare from the headlights of on-coming cars. He points out that when pink glasses are worn and when the windshield is tinted green, visibility is reduced considerably.

Green filters screen out red rays. Greentinted windshields are being used in some cars to cut down the infrared heat rays from the sun. However, almost two-thirds of the light from headlights is concentrated in the red end of the spectrum. Tinted glass becomes more dangerous at night when headlights are turned down or when the intensity is diminished by mud or mechanical defect, Dr. Miles said.

You can cheat Death here by being extra careful and by not wearing tinted glasses. If you are color blind, remember that the slightest tinted glass adds to your night visual problem, Dr. Miles admonishes.

The automobile accident death toll is appalling. More Americans have been killed on the highways than have been killed on the battlefields during the entire history of this country.

Accident Reduction Drive

Motor vehicle registrations in the United States now total more than 53,000,000. About 38,000 lives were snuffed out in auto accidents last year. But despite this, the highway fatality rate has dropped to 7.3 deaths per 100,000,000 vehicle miles—the lowest in history.

At the call of President Eisenhower, 2,000 delegates gathered in Washington to attend a White House Conference on Highway Safety. The object of the conference was to plan a nationwide "crusade" aimed at reducing accidents by 40%. Secretary of Commerce Sinclair Weeks, chairman of the conference, said the idea was not to develop



THREE-WAY SMASH—Momentum carried this truck and car to the curb. The truck overturned, striking another car waiting for a green light. Commented the U. S. Bureau of Public Roads on this Milwaukee Police Department photo: "It's a good advertisement for shatterproof glass."

new safety programs but to mobilize public support for those that already exist.

Last year, auto accidents not only claimed 38,000 lives, but also injured 1,400,000 and ran up a \$3,500,000,000 property-damage bill. By throwing your active support behind local, state and federal highway officials and their programs, you can help to reduce these figures.

Part of your "support" starts when you climb into your auto. Remember that some car you meet on the highway may have the man with the scythe riding in it. Drive so that you can give that car plenty of room when you meet. And above all, keep Death from getting behind your own steering wheel.

You can take an active role in helping to make your highways safer. Although much of the responsibility rests upon public administrators, you—the driver—hold the ultimate key to highway safety.

Many accidents are laid to speeding. Yet a State Police study on the Pennsylvania Turnpike showed that 75% of the Turnpike accidents occurred at speeds below 51 miles an hour. The U. S. Bureau of Public Roads reports that the average speed on the highways is still about 50.

But is speeding the actual cause? The

Pennsylvania State Police traced 85% of the Turnpike accidents to driver error. It has been found that many motorists, despite years behind the wheel, actually do not know how to drive. It has been estimated that it takes the average man seven years to learn by experience how to handle his car properly when formal training is omitted.

Driver training in 43% of the nation's high schools already has yielded tangible benefits. Even so, driver training in the high schools is expected to level off by 1960 with less than 60% of the potential enrollment signing up for the course unless something is done to stimulate interest.

Your efforts, coupled with those of your neighbors, could help bring adequate driving instruction to your son's or daughter's high school if such courses are not offered there now. Training of teen-agers is considered vastly important. This age group is involved in a large percentage of America's total death toll.

Studies at the Driving Research Laboratory at Iowa State College show that youthful male drivers can be greatly helped by such training. These courses are capable of reducing by 25% the number of accidents involving boys under 20 years of age.

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ASTRONOMY

Milky Way's Rotation

➤ THE TRUE rotation and mass of our galaxy, or local Milky Way universe, will be known about 1990, if not before.

Dr. C. D. Shane, director of the University of California's Lick Observatory, Mt. Hamilton, and C. A. Wirtanen, observer, have reported that the entire sky, as seen from the Northern Hemisphere, has been mapped.

The initial step in a long-range program, the map consists of some 1,246 plates, each 17 by 17 inches.

The study will not be completed until a new generation of astronomers exposes the last plate in a second sky map sometime around 1990.

Dr. W. H. Wright, retired director of the observatory, conceived the study in the 1930's because astronomers want to know our galaxy's rotation and mass accurately. To compute them, data are needed on the motions, at right angles to the line of

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R. P. CARGILLE LABORATORIES, INC. 117 Liberty Street, New York, N. Y. sight, of stars in the Milky Way. Such data are not now available.

Two sky maps, each taken years apart, were suggested by Dr. Wright. Both map sets will include in the background the extra-galactic nebulae, distant universes like our galaxy, that populate space. These nebulae are so far away that, in a period of half a century or so, it would be impossible to detect their movements. Their positions can thus be regarded as fixed.

The stars of our galaxy are comparatively close and, relative to the extra-galactic nebulae over a period of years, will make detectable movements in the line of sight.

Thus the extra-galactic nebulae act as a sort of fixed grid, across which local stars will move between the two star-mappings. Measuring such star movements will give the information needed to compute galactic rotation and mass accurately.

The first plates in the first sky map were taken in 1947. To gauge the accuracy obtainable, some test plates in the second map will be taken in the late 1950's. Measurement of the plates will be started by Dr. Stanislaus Vasilevskis, from the University of Riga, Latvia, now on the observatory staff.

After the preliminary tests, plates for the second map will be taken only as fast as they can be measured. Since the measurement is more time-consuming than the photography, the intervals between corresponding plates will become longer and longer, perhaps as much as 35 years.

Science News Letter, May 15, 1954

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