

## PUBLIC SAFETY

# Take It Easy!

Hurry is involved in most traffic accidents or near-accidents, regardless of the vehicle's speed. Study of near-accidents shows, however, that only a few have a single cause.

By MARJORIE VAN DE WATER

► IT IS ESTIMATED that by the year 1975, highway accidents will take an annual toll of 51,000 lives.

Not speed alone, but being "in a hurry" may be an important factor in causing accidents. The hurried driver may hold his speed down to the legal limit or a speed suited to conditions, and yet may show his hurry by being impatient to pass or unwilling to wait for the green light. This is indicated by a study of what was behind some 179 near-accidents. The study was made by a committee of the Highway Research Board, under the direction of Dr. T. W. Forbes of the American Institute for Research, Pittsburgh, Pa.

It was undertaken because it is so often difficult to obtain complete information from actual accidents because those involved fear legal complications.

A striking finding of the study was that only in two of the 179 near-accidents was a single factor held responsible. In most of the near-accidents from two to seven factors were mentioned as important.

One of the most important factors accounting for many near-accidents is hurry. A driver may act as though he were in a hurry, regardless of the speed of his car. One or more of the drivers involved were reported as "in a hurry" in 134 out of 179 near-accidents involving 358 drivers.

The remedy for this—a remedy which might reduce the toll of highway accidents materially—would seem to be to follow the advice of the Chinese philosopher and start earlier.

## Faulty Driving Behavior

Being in a hurry joins forces with other kinds of faulty driving behavior to bring about an accident.

One kind of behavior linked most frequently with hurry is the kind of driving classed by the committee as "pushing through."

The driver who pushes through is the driver who starts before the signal has quite turned green. Another is the driver who weaves from one lane to another in heavy traffic in an attempt to pass slow-moving cars. Another is the driver who cannot wait to pass the car stopped or slowed for a turn but who shoots ahead and passes on the wrong side. The driver who passes when an oncoming car is too close or the one who follows another car closely, impatient to pass, is guilty of "pushing through."

The driver who shows such accident-provoking behavior, as well as the one who is impatient to cross a main highway and

squeezes through fast-moving traffic coming from opposite directions, is usually in a hurry. Judged "in a hurry" were 43 out of 47 "pushing through" drivers.

Being in a hurry may even affect a driver's perception or judgment of conditions.

The hurried driver is the one likely to misjudge his opportunity to pass (13 out of 14 drivers) or the seriousness of a hazard ahead of him (15 out of 21). Out of a total of 79 drivers concerned in near-accidents involving misjudgment or errors of perception, 52 drivers were also in a hurry and their haste may actually have contributed to their misjudgment.

Speed is not nearly so important in causing near-accidents as many people have supposed. The greatest number of the incidents involved cars going from 50 to 55 miles per hour, but that is probably because more cars cruise at that speed rather than because it is an excessive speed. Only 2 out of 174 reports indicated that a car involved was going "too fast."

Neither did visibility conditions appear to contribute much to near-accidents. A total of 101 out of 162 incidents occurred under conditions of good visibility.

In only 18 cases out of 117 was the road surface reported to be wet, slippery or icy.

In 23 cases out of 74, one of the drivers involved seemed inattentive or "asleep at

the switch," and in another 20, a driver seemed to be asleep, drowsy or intoxicated.

In long cross-country drives, it would be wise to stop about every hour and a half for a 15-minute period of relaxation and to drink a cup of tea. This is indicated by another study conducted, however, not on the road but in a simulated driving situation using a "drivometer."

## Tea for the Road

One group of 28 persons "drove" for three hours straight with no pause for rest or refreshment.

Another 25 persons were served tea just before they started on the long "drive" and after an hour and a half of continuous "driving" they received a 15-minute rest period when tea was again served.

Tests of steadiness, reaction time, coordination, blood pressure and galvanic skin response, pulse and respiration were used to measure efficiency and compare the group who had rest and refreshment with those who drove for three hours straight.

The tea and pause combined, it was found, seem to have a quieting effect which is reflected in the tendency to work a little harder, to stay alert and to handle driving problems with greater efficiency.

Drs. A. R. Lauer and Virtus W. Suhr of the Driving Research Laboratory at Iowa State College reported this study to the Highway Research Board.

It is estimated that an obstruction to vision contributed to one out of every eight motor vehicle accidents, Drs. Barry G. King and Peter J. Sutro of the medical



*IN A HURRY—The cars shown in this U. S. Bureau of Public Roads photo are approaching, not speeding, but their impatience to pass the slow moving truck and the car leading the string is indicated by the fact that three have wheels across the solid white line. Such impatience often leads to a crash or the fright of a near miss.*

division, Office of Aviation Safety of the Civil Aeronautics Administration, reported to the Highway Research Board.

In two-fifths of the cases, vision was interfered with by objects on the car. The dangling baby shoes or fox's tail carried for luck may turn into bad luck if they keep a driver from seeing an obstacle in the road ahead or a car approaching rapidly on a side road.

### Visibility and Safe Driving

In rain or snow, windshield wiper design controls to a large extent the limits of what can be seen. Only a small portion of the transparent area is cleared by the windshield wiper; it may be less than 30% of the total transparent area. And even the area cleared by the wipers may nevertheless be seen through only dimly because of fogging.

The hood and the roof also put a limit on visibility. Insect shields or radiator ornaments may cut down visibility even more.

It is wise to limit windshield stickers to inspection or other stickers required by law and to place these where they will obstruct vision the least.

The driver's stature may limit his view of the road ahead.

The short driver who has no cushion on which to sit may be annoyed by having to play peek-a-boo through the steering wheel to get a view of the road ahead. In addition to this inconvenience which may give him (or her) a kink in the neck, a serious hazard exists. A car on the road ahead may be completely hidden by the upper part of the steering wheel.

In about a third of the cases where faulty vision caused accidents, it was a stationary object such as a tree or a building that interfered with seeing. In a few cases the interference was in the form of glare.

To these cases of obstructed vision must be added an undetermined number where the dangerous object failed to register in the driver's consciousness because of his inattention, distraction or other causes.

### Distraction Is Good and Bad

Distraction is a hazard to the driver.

Accidents have been caused when the driver momentarily turned his head to look at or speak to a passenger. A baby's sudden desire to plant a kiss on Daddy's cheek may cause the car to go into the ditch. Incidentally, the front seat beside the driver is the most dangerous place in the car for a young child. This is not only because of the danger of distracting the driver but also because, should a crash occur, a child is most likely to be seriously injured in this place.

Distraction, however, is not necessarily always prejudicial to safety. An occasional glance in the rear vision mirror or at the distant horizon may prevent a too great preoccupation with the highway. Preoccupation with the road may have a kind of hypnotic effect on the driver on a long trip, especially at night or on a monotonous, straight stretch of highway.

An attempt has been made by Dr. Leon Brody, director of research at the Center for

Safety Education, New York University, to find significant differences in the personal characteristics of chronic law violators and accident repeaters and those of a control group of drivers with good driving records.

He tested simple reaction time, but no significant difference was found.

On complex reaction time, no significant difference was found between the good drivers and the chronic violators.

On glare recovery time, mixed results were obtained.

On depth perception, no significant difference was found.

On field of vision, the good drivers were better than chronic violators in one or the other eye, but they did not differ from accident repeaters.

Visual acuity was one characteristic in which a significant difference was found. Chronic violators have significantly better vision than the good drivers!

### Personality and Good Driving

Other research studies have shown, however, that chronic violators are likely to be aggressive and intolerant of others. They tend to resent authority. They are inclined to have an exaggerated opinion of their importance and their abilities. And they are likely to be lacking in responsibility and tend to act impulsively and suddenly.

Any sudden action—changing lanes, pulling out from the curb, turning without previous signal, stopping, backing, passing or even starting up from a stop light—may put the driver and others on the road in serious danger.

Science News Letter, August 10, 1957

### MEDICINE

## One Million a Day Hospitalized Last Year

➤ MORE THAN a million people were in the nation's hospitals every day last year, and there will probably be even more this year, according to the annual report on hospital statistics published in *Hospital*, journal of the American Medical Association.

The data were gathered from 6,966 hospitals listed by the Association's annual directory and showed continuously increasing costs to both hospital and patient.

There were 22,089,719 hospital admissions last year, nearly a five percent rise from 1955. About 15,000,000 of these were in voluntary nonprofit hospitals.

Of all the admissions, less than two percent were to psychiatric hospitals in 1956, although over half of all patients in hospitals on any given day were in psychiatric institutions.

The number of babies born in hospitals rose only slightly from 1955 and totaled almost 3,500,000.

Hospitals had to pay out more than \$6,000,000,000 to care for their patients, an increase of 207% since 1946 and nearly an eight percent jump from 1955 expenditures.

Each patient cost the nonprofit short-term hospitals \$24.99 per day in 1956 and payroll expenses of these hospitals amounted to almost \$2,000,000,000.

Science News Letter, August 10, 1957

### ORNITHOLOGY

## Climate Does Not Keep Flamingo From Hatching

➤ THE FIRST BABY flamingo north of San Antonio, Texas, and Miami, Fla., has been hatched at the Philadelphia Zoological Garden.

The proud parents are American, or Ruddy, flamingos, one of six pairs that laid eggs this year.

The successful hatching may be the result of a little prodding on the part of John A. Griswold, the Zoo's curator of birds. A small island was built in the middle of the flamingos' pool and on it he fashioned three sample nests—just to give the birds some idea of what was expected. They caught on, but rebuilt the nests and added others.

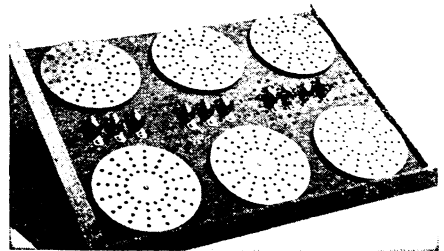
A flamingo nest is a simple affair, a column of dried mud 18 to 20 inches high and a foot across. Normally one egg is laid.

Science News Letter, August 10, 1957

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