# Teens Report Parents' Drinking and Driving

BY MIRIAM E. TUCKER

BALTIMORE — For as many as a third of adolescents who report riding in a car with a drinking driver, that driver is actually a parent rather than a peer.

That startling finding, from an observational study based on a cross-sectional questionnaire of 2,100 adolescents, highlights "a profoundly underrecognized and undertreated public health problem," Dr. Celeste R. Wilson said in a poster presentation at the annual meeting of the Pediatric Academic Societies.

Primary care providers need effective counseling strategies for adolescents exposed to parents who drive while intoxicated and more training in how to deal with parents who are placing their children at risk by engaging in this behavior," said Dr. Wilson, who is with the Center for Adolescent Substance Abuse Research at Children's Hospital, Boston.

The study sample was recruited from among 12- to 18-year-olds who arrived for routine care visits at one of nine primary care practices in Massachusetts, Vermont, and New Hampshire during 2005-2008.

The total 2,100 adolescents who completed the 20-item survey had a mean age of 16 years, and two-thirds were female. Half had at least one parent with a college degree, and 69% lived with both parents.

Of the 2,100 total respondents, 22% reported having ridden in a car in the previous 90 days with a driver who had been drinking. Of those 459 respondents, 41% identified that driver as someone living in their home. And of those 189 respondents, 91% (172) said that the drinking driver living in their home was an adult who was over 21 years of age.

Because of Institutional Review Board concerns about study subject protection, the survey did not directly inquire whether the drinking driver was a parent or guardian. Instead, the descriptions "an adult over 21 years of age" and "living in your home" were used as proxies, Dr. Wilson explained.

Adolescents who reported riding with a drinking driver who was an adult living in



Providers need strategies for teens exposed to parents who drink and drive.

their home were more likely to be female, to be white, and to have a parent with no college degree. Younger adolescents were more likely than older ones to report riding with a drinking "parent," she said.

Although the exact nature of the relationship between the adult drinking driver and the adolescent could not be confirmed, other questionnaire data supported the supposition that a majority of these were indeed parents.

The risk for having ridden with a drinking driver who was older than 21 and living in the teenager's home was more than three times greater for those who agreed with the survey items, "I have a parent whose use of alcohol or other drugs worries me," "I have a parent who gets drunk or high," and/or "I have a parent who needs treatment for alcohol or other drug problems." The risk was more than double for those who said, "I have a parent who uses alcohol or drugs soon after getting up in the morning.

Still, Dr. Wilson acknowledged that at least in some cases, the drinking driver might be an older sibling or a parent's romantic partner who is not the teen's parent. Nonetheless, "I think the key issue is that an adult who is well known to the adolescent is engaging in behavior that's potentially putting the adolescent at risk."

This study was funded by grants from the National Institutes of Health and several private foundations. Dr. Wilson stated that she had no financial disclo-

### **AMRIX®**

### (Cyclobenzaprine Hydrochloride Extended-Release Capsules)

**Brief Summary of Prescribing Information.** The following is a brief summary only. Please see full Prescribing Information for complete product information.

### DESCRIPTION

DESCRIPTION
AMRIX® (Cyclobenzaprine Hydrochloride Extended-Release Capsules) is a skeletal muscle relaxant which relieves muscle spasm of local origin without interfering with muscle function. The active ingredient in AMRIX extended-release capsules is cyclobenzaprine hydrochloride, USP.
AMRIX extended-release capsules for oral administration are supplied in 15 and 30 mg strengths.

### INDICATIONS AND USAGE

AMRIX is indicated as an adjunct to rest and physical therapy for relief of muscle spasm associated AMHIX is indicated as an adjunct to rest and physical therapy for relief of muscle spasm associated with acute, painful musculoskeletal conditions. Improvement is manifested by relief of muscle spasm and its associated signs and symptoms, namely, pain, tenderness, and limitation of motion.

AMRIX should be used only for short periods (up to two or three weeks) because adequate evidence of effectiveness for more prolonged use is not available and because muscle spasm associated with acute, painful musculoskeletal conditions is generally of short duration and specific therapy for longer periods is seldom warranted.

AMRIX has not been found effective in the treatment of spasticity associated with cerebral or spinal cord disease or in children with cerebral palsy.

### CONTRAINDICATIONS

- Hypersensitivity to any component of this product.
   Concomitant use of monoamine oxidase (MAO) inhibitors or within 14 days after their discontinuation
   Hyperpyretic crisis seizures and deaths have occurred in patients receiving cyclobenzaprine (or
   structurally similar tricyclic antidepressants) concomitantly with MAO inhibitor drugs.
   During the acute recovery phase of myocardial infarction, and in patients with arrhythmias, heart
   block conduction disturbances, or congestive heart failure.
- · Hyperthyroidism.

AMRIX is closely related to the tricyclic antidepressants, e.g., amitriptyline and imipramine. In short term studies for indications other than muscle spasm associated with acute musculoskeletal conditions, and usually at doses somewhat greater than those recommended for skeletal muscle spasm, some of the more serious central nervous system reactions noted with the tricyclic antidepressants have occurred (see WARNINGS, below, and ADVERSE REACTIONS section of full Prescribing Information).

Tricciic antidepressants have been reported to produce arrhythmias, sinus tachycardia, prolongation of the conduction time leading to myocardial infarction and stroke. AMRIX may enhance the effects of alcohol, barbiturates, and other CNS depressants.

As a result of a two-fold higher cycloberuzaprine plasma levels in subjects with mild hepatic impairment, as compared to healthy subjects, following administration of immediate-release cycloberuzaprine and because there is limited dosing flexibility with AMRIX, use of AMRIX is not recommended in subjects with mild, moderate or severe hepatic impairment. AMRIX is closely related to the tricyclic antidepressants, e.g., amitriptyline and imipramine. In short

recommended in subjects with mild, moderate or severe hepatic impairment.

As a result of a 40% increase in cyclobenzaprine plasma levels and a 56% increase in plasma half-life following administration of AMRIX in elderly subjects as compared to young adults, use of AMRIX is not recommended in elderly.

Because of its atropine-like action, AMRIX should be used with caution in patients with a history of urinary retention, angle-closure glaucoma, increased intraocular pressure, and in patients taking anticholinergic medication.

# Information for Patients

AMRIX, especially when used with alcohol or other CNS depressants, may impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle.

# Drug Interactions

Drug interactions

AMRIX may have life-threatening interactions with MAO inhibitors. (See CONTRAINDICATIONS.)

AMRIX may enhance the effects of alcohol, barbiturates, and other CNS depressants. Tricyclic antidepressants may block the antihypertensive action of guanethidine and similarly acting compounds. Tricyclic antidepressants may enhance the seizure risk in patients taking tramadol (ULTRAM® (tramadol HCl tablets, Ortho-McNeil Pharmaceutical) or ULTRACET® (tramadol HCl and acetaminophen tablets, Ortho-McNeil Pharmaceutical)).

# Carcinogenesis, Mutagenesis, Impairment of Fertility In rats treated with cyclobenzaprine for up to 67 weeks at doses of approximately 5 to 40 times the

maximum recommended human dose, pale, sometimes enlarged, livers were noted and there was a dose-related hepatocyte vacuolation with lipidosis. Cyclobenzaprine did not affect the onset, incidence, or distribution of neoplasia in an 81-week study in the mouse or in a 105-week study in the rat. At oral doses of up to 10 times the human dose, cyclobenzaprine did not adversely affect the reproductive performance or fertility of male or female rats. A battery of mutagenicity tests using bacterial and mammalian systems for point mutations and cytogenic effects have provided no evidence for a mutagenic potential for cyclobenzaprine.

Pregnancy
Pregnancy
Pregnancy Category B: Reproduction studies have been performed in rats, mice, and rabbits at doses up to 20 times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to cyclobenzaprine. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers
It is not known whether this drug is excreted in human milk. Because cyclobenzaprine is closely releated to the tricyclic antidepressants, some of which are known to be excreted in human milk, and the control woman. related to the tricyclic antidepressants, some of which are known to be excrete caution should be exercised when AMRIX is administered to a nursing woman.

Safety and effectiveness of AMRIX has not been studied in pediatric patients.

Wee in the Elderly
The plasma concentration and half-life of cyclobenzaprine are substantially increased in the elderly when compared to the general patient population (see CLINICAL PHARMACOLOGY, Pharmacokinetics, Special Populations, Elderly in full Prescribing Information). Accordingly, AMRIX should not be used in the elderly

### ADVERSE REACTIONS

se reactions in the two 14-day clinical efficacy trials are presented in Table 1.

Table 1: Incidence of the Most Common Adverse Reactions Occurring in ≥3% of Subjects in Any Treatment Group in the Two Phase 3, Double-Blind AMRIX Trials			
	AMRIX 15 mg	AMRIX 30 mg	Placebo
	N = 127	N = 126	N = 128
Dry mouth	6%	14%	2%
Dizziness	3%	6%	2%
Fatigue	3%	3%	2%
Constipation	1%	3%	0%
Somnolence	1%	2%	0%
Nausea	3%	3%	1%
Dyspepsia	0%	4%	1%

In a postmarketing surveillance program (7607 patients treated with cyclobenzaprine 10 mg TID), the adverse reactions reported most frequently were drowsiness, dry mouth, and dizziness. Among the less frequent adverse reactions, there was no appreciable difference in incidence in controlled clinical studies or in the surveillance program. Adverse reactions which were reported in 1% to 3% of the patients were: fatigue/tredness, asthenia, nausea, constipation, dyspepsia, unpleasant taste, blurred vision, headache, nervousness, and confusion. The following adverse reactions have been reported in post-marketing experience or with an incidence of less than 1% of patients in clinical trials with the 10 mg TID tablet:

Body as a Whole: Syncope: malaise.

Cardiovascular: Tachycardia; arrhythmia; vasodilatation; palpitation; hypotension.

Digestive: Vomiting; anorexia; diarrhea; gastrointestinal pain; gastritis; thirst; flatulence; edema of the tongue; abnormal liver function and rare reports of hepatitis, jaundice, and cholestasis.

Hypersensitivity: Anaphylaxis; angioedema; pruritus; facial edema; urticaria; rash.

Musculoskeletal: Local weakness.

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Nervous System and Psychiatric: Seizures, ataxia: vertigo: dysarthria: tremors: hypertonia: convulsions; muscle twitching; disorientation; insomnia; depressed mood; abnormal sensations; anxiety; agitation; psychosis, abnormal thinking and dreaming; hallucinations; excitement; paresthesia; diplopia.
Skin: Sweating.
Special Senses: Ageusia; tinnitus.
Urogenital: Urinary frequency and/or retention.

DRUG ABUSE AND DEPENDENCE

Pharmacologic similarities among the tricyclic drugs require that certain withdrawal symptoms be considered when AMRIX (Cyclobenzaprine Hydrochloride Extended-Release Capsules) is administered, even though they have not been reported to occur with this drug. Abrupt cessation of treatment after prolonged administration rarely may produce nausea, headache, and malaise. These are not indicative of addiction.

OVERDOSAGE
Although rare, deaths may occur from overdosage with AMRIX. Multiple drug ingestion (including alcohol) is common in deliberate cyclobenzaprine overdose. As management of overdose is complex and changing, it is recommended that the physician contact a poison control center for current information on treatment. Signs and symptoms of toxicity may develop rapidly after cyclobenzaprine overdose; therefore, hospital monitoring is required as soon as possible.

All patients suspected of an overdose with AMRIX should receive gastrointestinal decontamination. This should include large volume gastric lavage followed by activated charcoal. If consciousness is impaired, the airway should be secured prior to lavage and emesis is contraindicated.

The principles of management of child and adult overdosage are similar. It is strongly recommended that the physician contact the local poison control center for specific pediatric treatment.

## DOSAGE AND ADMINISTRATION

The recommended adult dose for most patients is one (1) AMRIX 15 mg capsule taken once daily. Some patients may require up to 30 mg/day, given as one (1) AMRIX 30 mg capsule taken once daily or as two (2) AMRIX 15 mg capsules taken once daily.

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Use of AMRIX for periods longer than two or three weeks is not recommended (see INDICATIONS)

AND USAGE).

Dosage Considerations for Special Patient Populations: AMRIX should not be used in the elderly or in patients with impaired hepatic function (see WARNINGS).

lease capsules are available in 15 and 30 mg strengths, packaged in bottles

KEEP THIS AND ALL MEDICATION OUT OF THE REACH OF CHILDREN. IN CASE OF ACCIDENTAL OVERDOSE, SEEK PROFESSIONAL ASSISTANCE OR CONTACT A POISON CONTROL CENTER IMMEDIATELY.

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