

# ALCOHOL DEPENDENCE: THE HUMAN, MEDICAL AND ECONOMIC TOLL

## ABOUT ALCOHOL DEPENDENCE

- Alcohol dependence is characterized by the following traits:
  - Craving: a strong urge to drink<sup>1</sup>
  - Loss of control: inability to stop drinking once begun<sup>2</sup>
  - Physical dependence: withdrawal (nausea, sweating, shakiness, and anxiety) when a person stops drinking<sup>3</sup>
  - Tolerance: the need to consume ever greater amounts of alcohol to get “high”<sup>4</sup>
- Alcohol abuse is defined as a level of drinking that causes “clinically significant” impairment or distress, but not physical dependence.<sup>5</sup>
- Nearly 19 million Americans<sup>6</sup>, or 8% of the U.S. population, need treatment for an “alcohol problem,” and 16 million drink heavily.<sup>7</sup>
- One in four children lives with a parent who is dependent on, or abuses, alcohol.<sup>8</sup>

## THE PHYSICAL IMPACT OF ALCOHOLISM

- Alcohol dependence accounts for approximately 100,000 deaths each year.<sup>9</sup>
- Heavy drinking increases the risk for heart disease, liver disease<sup>10</sup>, infectious diseases (tuberculosis, pneumonia and HIV),<sup>11</sup> cancers of the mouth, throat, esophagus, liver, stomach, colon, rectum and breast.<sup>12</sup>
- Chronic heavy drinking a leading cause of cardiovascular illnesses such as cardiomyopathy, coronary artery disease, high blood pressure, dangerous heart rhythms and stroke.<sup>13</sup>
- Long-term heavy alcohol use is the leading cause of illness and death from liver disease in the United States.<sup>14</sup>
- Consuming at least four alcoholic beverages a day significantly increases the risk of developing any type of cancer.<sup>15</sup>
- Psychiatric disorders such as depression, anxiety disorders and antisocial personality disorder occur more often among alcoholics than the general population.<sup>16</sup>
- Fetal alcohol syndrome, alcohol-induced damage to the developing brain of an unborn baby that can result when a woman consumes alcohol during pregnancy, is the leading cause of preventable mental retardation.<sup>17</sup>
- Harmful and hazardous drinking is involved in about one-third of suicides, one-half of homicides and one-third of child abuse cases.<sup>18</sup>

## THE COST OF ALCOHOLISM

- Alcoholism abuse and dependence costs the United States \$185 billion dollars in direct and indirect social costs per year<sup>19</sup>, with more than 70% of the cost attributed to lost productivity.<sup>20</sup>

## UNMET DIAGNOSTIC AND TREATMENT NEEDS

- Nearly 8 million Americans are alcohol dependent<sup>21</sup>, but only 2.4 million have been diagnosed with the disease<sup>22</sup>, and just 139,000 receive medication to treat it.<sup>23</sup>

## CURRENT TREATMENTS

- **Campral<sup>®</sup> (acamprosate calcium) delayed-release tablets for the treatment of alcohol dependence** – On July 29, 2004, the FDA approved Campral<sup>®</sup> for the maintenance of abstinence from alcohol in patients with alcohol dependence who are

abstinent at treatment initiation. Campral is a registered trademark of Merck Santé s.a.s. subsidiary of Merck KGaA, Darmstadt, Germany. Treatment should be part of a comprehensive management program that includes psychosocial support. Campral is not indicated for the treatment of alcohol abuse.

- The mechanism of action of Campral in maintenance of alcohol abstinence is not completely understood. Originally, several neurotransmitter systems, including GABA, were investigated for a possible role in Campral's mechanism of action. However, recent evidence suggests Campral's main interaction is with the glutamate system. Chronic alcohol exposure is hypothesized to alter the normal balance between neuronal excitation and inhibition. Campral is believed to act on the biochemical systems that are involved in alcohol dependence. Campral interacts with neurotransmitter systems and is hypothesized to restore the normal balance. This mechanism of action is different from that ascribed to currently available medications, which either block the “high” associated with alcohol or induce vomiting if alcohol is ingested.
- **Antabuse**<sup>®</sup> (disulfiram) has been used to fight alcohol abuse since 1949.<sup>24</sup> Antabuse discourages drinking by making the drinker feel nauseated if he or she consumes alcohol.<sup>25</sup>
- **ReVia**<sup>™</sup> (naltrexone) was approved by the FDA in 1995. ReVia blocks the “high” or reinforcing effects produced by alcohol use.<sup>26</sup>

**FOR MORE INFORMATION ABOUT ACAMPROSATE, CONTACT:**

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- **Professional Affairs:** Kathleen Brader, (800-678-1605, extension 7301)

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- <sup>1</sup> National Institute on Alcohol Abuse and Alcoholism. Frequently asked Questions on Alcohol Abuse and Alcoholism. Available at <http://www.niaaa.nih.gov/faq/faq.htm>. Accessed December 14, 2004.
- <sup>2</sup> National Institute on Alcohol Abuse and Alcoholism. Frequently asked Questions on Alcohol Abuse and Alcoholism. Available at <http://www.niaaa.nih.gov/faq/faq.htm>. Accessed December 14, 2004.
- <sup>3</sup> National Institute on Alcohol Abuse and Alcoholism. Frequently asked Questions on Alcohol Abuse and Alcoholism. Available at <http://www.niaaa.nih.gov/faq/faq.htm>. Accessed December 14, 2004.
- <sup>4</sup> National Institute on Alcohol Abuse and Alcoholism. Frequently asked Questions on Alcohol Abuse and Alcoholism. Available at <http://www.niaaa.nih.gov/faq/faq.htm>. Accessed December 14, 2004.
- <sup>5</sup> "Recovery: It's a Family Affair. Let's Talk About It." Fact Sheet. 16<sup>th</sup> Annual Alcohol Awareness Month. National Council on Alcoholism and Drug Dependence (NCADD), Inc.
- <sup>6</sup> SAMSHA's National Survey on Drug Use – Per Forest Laboratories, Inc. slide.
- <sup>7</sup> SAMSHA: Results from the 2003 national survey on drug use and health. Available at <http://oas.samhsa.gov/NHSDA/2k3NSDUH/2k3results.htm#ch3>. Accessed December 14, 2004.
- <sup>8</sup> Grant, B.F.; Dawson, D.A.; Stinson, F.S.; Chou, S.P.; Dufour, M.C.; Pickering, R. The 12-month prevalence and trends in DSM-IV alcohol abuse and dependence: United States, 1991-1992 and 2001-2002. *Drug and Alcohol Dependence* 2004; (74); 223.
- <sup>9</sup> Garbutt J, M.D.; West S, PhD, MPH.; Carey T, MD, MPH.; Lohr K, PhD.; Crews F, PhD. Pharmacological Treatment of Alcohol Dependence: A Review of the Evidence. *Jama*. 1999; 281(14); 1323.
- <sup>10</sup> Bagnardi V, Blangiardo M, Vecchia C, et al. Alcohol consumption and the risk of cancer. *Alcohol Research and Health*. 2001; 25(4); 263-270.
- <sup>11</sup> 10<sup>th</sup> Special Report to the U.S. Congress on Alcohol and Health. Secretary of Health and Human Services. Rockville, Md. Also: U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health, National Institute on Alcohol Abuse and Alcoholism, June 2000; NIH publication no. 00-1583. pg. 214.
- <sup>12</sup> Bagnardi V, Blangiardo M, Vecchia C, et al. Alcohol consumption and the risk of cancer. *Alcohol Research and Health*. 2001; 25(4); 263-270.
- <sup>13</sup> 10<sup>th</sup> Special Report to the U.S. Congress on Alcohol and Health. Secretary of Health and Human Services. Rockville, Md. Also: U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health, National Institute on Alcohol Abuse and Alcoholism, June 2000; NIH publication no. 00-1583. Pg. 240.
- <sup>14</sup> 10<sup>th</sup> Special Report to the U.S. Congress on Alcohol and Health. Secretary of Health and Human Services. Rockville, Md. Also: U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health, National Institute on Alcohol Abuse and Alcoholism, June 2000; NIH publication no. 00-1583. Pg. 198.
- <sup>15</sup> Bagnardi V, Blangiardo M, Vecchia C, et al. Alcohol consumption and the risk of cancer. *Alcohol Research and Health*. 2001; 25(4); 263-270.
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- <sup>18</sup> "Recovery: It's a Family Affair. Let's Talk About It." Fact Sheet. 16<sup>th</sup> Annual Alcohol Awareness Month. National Council on Alcoholism and Drug Dependence (NCADD), Inc.
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- <sup>20</sup> 10<sup>th</sup> Special Report to the U.S. Congress on Alcohol and Health. Secretary of Health and Human Services. Rockville, Md. Also: U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health, National Institute on Alcohol Abuse and Alcoholism, June 2000; NIH publication no. 00-1583. Pg. 364.
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- <sup>22</sup> SAMSHA's National Survey on Drug Use – Per Forest Laboratories, Inc. slide.
- <sup>23</sup> Verispan – Per Forest Laboratories, Inc. slide.
- <sup>24</sup> National Institute on Alcohol Abuse and Alcoholism. Alcoholism: Getting the Facts. Available at <http://www.niaaa.nih.gov/publications/booklet.htm> Accessed December 14, 2004.
- <sup>25</sup> Solhkhah R, M.D.; Wilens T, MD. Pharmacotherapy of Adolescent Alcohol and Other Drug Use Disorders. *Alcohol Health and Research World*.1998; 22(2);123.
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