

## *Issue Briefing #5*

### **ALCOHOL & CANCER**

Alcohol is a **proven causative factor** in a number of cancers, including those of the head, neck, female breast, liver, colon, & rectum. It is also suspect in cancers of the lung, pancreas, prostate, endometrium, stomach and bladder.

Alcohol is greatly underestimated as a causative factor and those interested in reducing the burden of cancer should be informed of the role of alcohol as a causative agent, and support the **prevention and treatment of alcohol problems.**

Alcoholic beverage consumption is “known to be a human carcinogen” according to the National Toxicology Program, “based on sufficient evidence of carcinogenicity in human studies that indicate a causal relationship between consumption of alcoholic beverages and cancer.”<sup>1</sup> In fact, alcohol has been estimated to be responsible for 5% of avoidable cancer deaths worldwide.<sup>2</sup>

Specific types of cancer tied to alcohol ingestion include those of the:

- ◆ Head (oral cavity, etc.)<sup>3</sup>
- ◆ Neck (larynx, pharynx, esophagus, etc.)<sup>4</sup>
- ◆ Female breast<sup>5</sup>
- ◆ Colon & rectum<sup>6</sup>
- ◆ Liver<sup>7</sup>

These cancers are among the most deadly, with colorectal (639,000 deaths per year), liver (610,000 deaths), and female breast cancer (519,000 deaths) being 3 of the top 5 cancer killers in the United States.

Furthermore, alcohol intake raises the risk for female breast and colorectal cancer even at levels of alcohol intake deemed moderate for other health issues (i.e. there is a linear, dose-response relationship between alcohol intake and these cancers).

For a second group of cancers – those of the lung,<sup>8</sup> pancreas,<sup>9</sup> prostate,<sup>10</sup> endometrium,<sup>11</sup> stomach,<sup>12</sup> and bladder<sup>13</sup> - study outcomes have been mixed regarding the role of alcohol.

Sadly, despite this large body of research, there is little awareness of the link between alcohol and cancer, even among health care professionals:

- ◆ A survey of female college students from 23 Western countries found that fewer than 1 in 20 could correctly identify alcohol as a risk factor for breast cancer.<sup>14</sup>
- ◆ A 2008 study of New York State found that “regular alcohol use was overlooked as a risk factor for oral cancer by both the public and health care providers.”<sup>15</sup>
- ◆ Similarly, a study of hospital nurses in Britain found that only 30% were aware that alcohol was a prime risk factor for oral cancer.<sup>16</sup>
- ◆ Only 32% of first-degree relatives of colorectal cancer patients knew that excessive alcohol consumption was a risk factor for that disease.<sup>17</sup>
- ◆ Media coverage of breast cancer research frequently overlooks the role of alcohol.<sup>18</sup>

### **Recommendations:**

1. Stakeholders in the fight against cancer (oncologists, advocacy groups, etc.) should support evidence-based alcohol policies<sup>19</sup> as a key part of a public health approach to winning the war on cancer.<sup>20</sup>
2. Alcohol prevention advocates and the cancer prevention community should come together to launch large- and small-scale public (and professional) awareness campaigns, highlighting the risks of alcohol consumption to developing cancer.
3. Specifically, with regard to breast cancer, advocates should resist alcohol industry attempts at “pinkwashing” i.e., positioning themselves as leaders in the struggle to eradicate breast cancer while engaging in practices that may be contributing to rising rates of the disease (per Breast Cancer Action – see <http://www.pinkwashing.org>).

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- <sup>1</sup> Report on Carcinogens, 11<sup>th</sup> edition.
- <sup>2</sup> Danaei, Vander Hoorn, Lopez, Murray, Ezzati, et al. (2005)
- <sup>3</sup> Allen, Beral, Casabonne, Kan, Reeves, Brown, et al. (2009); Boffetta & Hashibe (2006)
- <sup>4</sup> Allen, Beral, Casabonne, Kan, Reeves, Brown, et al. (2009); Boffetta & Hashibe (2006)
- <sup>5</sup> Allen, Beral, Casabonne, Kan, Reeves, Brown, et al. (2009); Boffetta & Hashibe (2006)
- <sup>6</sup> Allen, Beral, Casabonne, Kan, Reeves, Brown, et al. (2009); Boffetta & Hashibe (2006); Park, Bae, Nam, & Yoo (2008); Cho, Smith-Warner, Ritz, van den Brandt, Colditz, Folsom, et al. (2004);
- <sup>7</sup> Allen, Beral, Casabonne, Kan, Reeves, Brown, et al. (2009); Boffetta & Hashibe (2006)
- <sup>8</sup> Bandera, Freudenheim, & Vena (2001)
- <sup>9</sup> Watters, Park, Hollenbeck, Schatzkin & Albanes (2010); Silverman, Brown, Hoover, Schiffman, Lillemoe, Schoenberg, et al. (1995); Stevens, Roddam, Spencer, Pirie, Reeves, Green, et al. (2009);
- <sup>10</sup> Rizos, Papassava, Golias, & Charalabopoulos (2010) ;
- <sup>11</sup> Setiawan, Monroe, Goodman, Kolonel, Pike, & Henderson (2008)
- <sup>12</sup> Liu & Russell (2008); Layke & Lopez (2004)
- <sup>13</sup> Demirel, et al.
- <sup>14</sup> Peacey, Steptoe, Davidsdóttir, Baban, & Wardle (2006)
- <sup>15</sup> Oh, Kumar, & Cruz (2008), p. 37
- <sup>16</sup> Carter, Harris, Kavi, Johnson, & Kanatas (2009)
- <sup>17</sup> Akhtar, Sinha, McKenzie, Sagar, Finan, & Burke (2008)
- <sup>18</sup> Houn, Bober, Huerta, Hursting, Lemon, & Weed (1995)
- <sup>19</sup> Such as those identified by the Task Force on Community Preventive Services, see <http://www.thecommunityguide.org/alcohol>
- <sup>20</sup> Frieden, Myers, Krauskopf, & Farley (2008)

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