

Health Warning Labels

The Issue in Brief

Information about beverage alcohol is shared with consumers in a number of different ways, including on containers and packaging.

Health warning labels (HWLs) are used to offer directional information about drinking.

There is general concurrence across studies and reviews of the available literature that the effectiveness of HWLs on behavior is limited.

The evidence:

The inclusion of HWLs on containers and packaging of beverage alcohol is mandated by the governments of a number of countries around the world.

Where warning labels are not mandatory, producers may voluntarily include them on their products.

The available evidence shows that HWLs have little impact on improving knowledge about potential risks or on changing drinking behavior. This may be because it is already commonly known that alcohol misuse can lead to harm.

While consumers are generally aware of the existence of HWLs, comprehension and recall of the messages is low.

Labeling of alcohol beverages and of other consumer goods has not shown an impact on drinking behavior for those considered “at risk,” including heavy drinkers, pregnant women, and young people.

Although awareness of HWLs may be higher among heavier drinkers than in the general population, there is little impact on harmful drinking patterns.

Despite a lack of robust evidence of effectiveness, international public opinion and support for HWLs has remained consistently high over the years.

ICAP Issues Briefings address specific topics relevant to alcohol policy, providing a succinct overview of key evidence. Where appropriate, they include an analysis of intended and unintended outcomes, country-level case studies, and main positions around a particular debate.

Research limitations:

There is little cross-cultural research on the impact of HWLs.

Some have suggested that the design and placement of HWLs are responsible for their lack of impact.

It may be difficult to separate the influence of HWLs from other measures that may be implemented at the same time.

However, any value in HWLs as a prevention tool is best viewed as part of a general effort to provide reminders, information, and education to consumers.

Relevant ICAP publications:

International Center for Alcohol Policies (ICAP). (2005–ongoing). *Module 1: Alcohol education*. In *ICAP Blue Book: Practical guides for alcohol policy and prevention approaches*. Washington, DC: Author. Available: <http://www.icap.org/PolicyTools/ICAPBlueBook/BlueBookModules/1AlcoholEducation>

International Center for Alcohol Policies (ICAP). (2008). *Informing consumers about beverage alcohol*. ICAP Report 20. Washington, DC: Author. Available: www.icap.org/Publications/ICAPReports

International Center for Alcohol Policies (ICAP). (ongoing). *Policy table: Health warning labels* (Online). Available: <http://www.icap.org/Table/HealthWarningLabels>

International Center for Alcohol Policies (ICAP). (ongoing). *Policy table: International drinking guidelines* (Online). Available: <http://www.icap.org/Table/InternationalDrinkingGuidelines>

International Center for Alcohol Policies (ICAP). (ongoing). *Policy table: International guidelines on drinking and pregnancy* (Online). Available: <http://www.icap.org/Table/InternationalGuidelinesOnDrinkingAndPregnancy>

What Is the Issue?

Information about beverage alcohol is shared with consumers in a number of different ways, including on containers and packaging.

Information conveyed can be two-fold (1):

- factual information relating to the beverage itself;
- directional information that provides advice or recommendations about drinking patterns.

Health warning labels (HWLs) are used to offer directional information about drinking.

They appear on containers of beverage alcohol and are intended as reminders to consumers about risks associated with certain drinking patterns.

HWLs focus on three themes:

- general health risks associated with alcohol consumption;
- health risks of drinking during pregnancy;
- drinking while driving or operating machinery.

Labels may also include additional information, such as reference to official drinking guidelines or to alcohol units or standard drinks.

What Is the Debate?

There is general concurrence across studies and reviews of the available literature that the effectiveness of HWLs on behavior is limited (2–5).

Nevertheless, they remain an oft-recommended policy option, particularly among advocacy groups.

Advocates of HWLs argue that warnings help to increase awareness. Therefore, even if labels are not effective in changing behavior, they serve to remind and inform consumers about potential risks:

“There is a general consensus among researchers that the impact of labeling on drinking behavior may only be minimal, warning labels can nevertheless be expected to increase knowledge, and perhaps even to change risk perceptions.” (6, p. 2)

Others point to evidence of ineffectiveness in changing behavior and argue against the utility of HWLs as a policy tool:

“The label law has not reduced alcohol consumption for the heavier [drinkers] (i.e., risk drinkers). The women who put their fetus at risk by drinking in excess of one standard drink per day are not heeding the warning label.

The lack of response from this subgroup of women is consistent with earlier studies suggesting that high risk women are less responsive to media campaigns.” (7, p. 287–288; see also 8)

What Is the Evidence?

The inclusion of HWLs on containers and packaging of beverage alcohol is mandated by the governments of a number of countries around the world.

Specifications about what is to be included on an HWL vary.

- While some HWL provide general messages, others focus on excessive consumption or alcohol abuse, or point to specific potential risks (e.g., drinking during pregnancy).
- Still others warn that sale of alcohol to minors is prohibited.
- In some countries, there are specific requirements regarding the size and placement of HWLs.
- While the French government mandates HWLs on pregnancy, it offers the option of placing a pictogram warning about drinking during pregnancy instead of a text message.

The following are examples of HWLs from different countries around the world. A comprehensive list may be found at: www.icap.org/Table/HealthWarningLabels.

- Argentina (9):
 - “Drink in moderation.”
 - “Sale prohibited to those under 18 years of age.”
- France (10):
 - “Drinking alcoholic beverages during pregnancy even in small quantities can have grave/serious consequences for the health of the baby.” OR
 - Use the government-issued symbol showing a diagonal line being superimposed on an image of a pregnant woman holding a glass.
- South Korea (11):
 - “Warning: Excessive consumption of alcohol may cause liver cirrhosis or liver cancer and is especially detrimental to the mental and physical health of minors.”
 - “Warning: Excessive consumption of alcohol may cause liver cirrhosis or liver cancer, and consumption of alcoholic beverages impairs your ability to drive a car or operate machinery and may increase the likelihood of car accidents during work.”

- “Excessive drinking may cause cirrhosis of the liver or liver cancer and increase the probability of accidents while driving or working.”
- USA (12):
 - “GOVERNMENT WARNING: (1) According to the Surgeon General, women should not drink alcoholic beverages during pregnancy because of the risk of birth defects. (2) Consumption of alcoholic beverages impairs your ability to drive a car or operate machinery, and may cause health problems.”

Where warning labels are not mandatory, producers may voluntarily include them on their products.

- In the United Kingdom, some producers voluntarily include reference to the Health Department’s recommendations on drinking (13), provide links to the website of the prevention charity Drinkaware Trust, and include one of three messages: “Know Your Limits,” “Enjoy Responsibly,” or “Drink Responsibly.”
- Labeling is voluntary in Japan and refers to the legal purchase age for alcohol and drinking during pregnancy and breastfeeding (14).
- Some companies have adopted a policy of voluntary inclusion of warning messages in all major markets in which they operate, even where HWLs are not mandated by law (15).

Impact of HWLs

The available evidence shows that HWLs have little impact on improving knowledge about potential risks or on changing drinking behavior.¹

HWLs do little to change overall levels of alcohol consumption (16).

While consumers are generally aware of the existence of HWLs, comprehension and recall of HWL messages is low (17).

- Data gathered in the United States (U.S.) following the introduction of HWLs in 1989 showed a steady increase in awareness among those exposed to them over the subsequent five years, followed by a leveling-off (18–21).
- A similar trend was observed in the Canadian province of Ontario after the introduction of the U.S. label (22).

Similarly, HWLs do not appear to affect consumers’ perceptions of risks that may be associated with drinking (17, 23).

There is some evidence to suggest that the level of recall may depend on the message being conveyed.

- For example, based on U.S. studies, recall was highest for messages about birth defects (81%), followed by the drinking and driving message (46%), and lowest for messages about operating machinery (39%) (24).
- Women of childbearing age were found to have higher recall of the message about birth defects (25).
- More recent studies have shown that recall of messages about birth defects has continued to grow since the introduction of the U.S. HWLs, while there has been no change in recall about the drink-driving message (20).

There is no observed association between how health conscious individuals are and the attention they pay to health warning labels and the messages they contain (26).

However, there does appear to be a correlation between message recall and level of education: More educated consumers learned the messages more quickly than those who were less educated (20).

Labeling on alcohol beverages and other consumer goods has not shown an impact on behavior for those considered “at risk,” including heavy drinkers, pregnant women, and young people.

Although awareness of HWLs may be higher among heavier drinkers than in the general population, there is little impact on harmful drinking patterns.

- Awareness of labels has been reported to be higher among heavier drinkers than among other groups, possibly due to greater exposure to containers and, therefore, the labels on them (18, 20, 26, 27).
- The impact of HWLs on perceptions of risk and drinking behavior among heavier drinkers is negligible (17, 28), and no direct impact has been observed on alcohol-related problems (29, 30).
- There is also evidence to suggest that heavy drinkers may be more likely than lighter drinkers to discount health warnings and perceive them as less believable (31, 32).

Although they have been found to raise awareness, HWLs by themselves do not show a significant impact on the drinking behavior of pregnant women.

¹ There has been relatively little research on HWLs and their effectiveness since the 1990s, with most of it following the introduction of mandatory labels in the United States in 1989.

While pregnant women and women of childbearing age tend to be aware of HWLs, the evidence is inconsistent on the effect of these messages on knowledge and perceptions about drinking and potential risks (7, 25).

- It has been suggested that, despite increased awareness and knowledge about potential risks from drinking during pregnancy, many women do not consider themselves or their fetuses to be at risk (33).
- Data from the U.S. have suggested that recall is high among pregnant women regarding messages on HWLs, particularly about birth defects (20, 24, 25), although it may not affect behavior.
- A Danish study has shown that, despite HWLs, pregnant women consider at least some drinking to be acceptable (28).
- There is some evidence that the presence of HWLs may encourage discussion about the effects of drinking by pregnant women (7, 8, 25, 34). However, much of this occurs with family and friends, with little dialogue with healthcare providers (28, 35).
- U.S. data also suggest that women going through their first pregnancy were more likely to reduce drinking and heed HWLs than women who had been pregnant before (36).

The impact of HWLs on the perceptions and behavior of pregnant women is moderated by several factors.

- A survey of Hispanic women in the U.S. showed that cultural beliefs, language skills, and level of education were closely linked to knowledge about HWLs (37, 38). Nutritional information on alcohol containers (e.g., about calories) was more likely to result in changes in drinking patterns than health warnings (38).
- Cultural beliefs about drinking, as well as the degree of acculturation among immigrant populations, for example, also play a role in the degree of awareness and behavior change (39).
- The evidence also suggests that younger women with higher education and income levels are more likely to drink around the time they become pregnant (37-39).

The perceptions and drinking behaviors of young people also appear to be unaffected by HWLs.

- Studies of adolescents in the U.S. following the introduction of warning labels showed that awareness among this group rose but was not accompanied by behavior change (16, 19).
- Some researchers have suggested that risk information on HWLs may actually encourage consumption by those looking for risky activity, the so-called “boomerang” effect (40).

The effectiveness of HWLs in the prevention of alcohol-impaired driving has been challenged, although the evidence is equivocal.

- A U.S. study of 16- to 17-year-olds five years after the introduction of HWLs demonstrated a lack of clear reductions attributable to the warnings on self-reported alcohol consumption and impaired driving, thus suggesting that HWLs did not affect these behaviors (19).
- However, other research indicates that, after seeing HWLs, those who were current drinkers and once drove drunk were significantly more likely to deliberately not drive after drinking than before seeing HWLs (24, 27).

Despite lack of robust evidence about the effectiveness of HWLs, public opinion and support has remained consistently high over the years.

- Evidence from the U.S. has shown that HWLs and other measures to provide information and education to consumers are widely supported by the general public (19).
- The 2007 special Eurobarometer report on alcohol found strong support among European Union citizens for putting warnings on alcohol bottles and advertisements, particularly for pregnant women and drivers (41).
- An Australian survey carried out by the Victorian Health Promotion Foundation among young people aged 17 to 25 years and parents of 15- to 18-year-olds revealed strong support for health warning labels (42).

What Are the Research Limitations?

There is little cross-cultural research on the impact of HWLs.

Most of the available data are derived from studies conducted in the U.S., following the introduction of HWLs in 1989. Little work has been done on the impact of HWLs on awareness, knowledge, and behavior in other countries.

Some have suggested that the design and placement of HWLs are responsible for their lack of impact.

The influence of warning labels may decrease as their novelty wears off over time.

- While repeated exposure may initially provide a deeper understanding of messages, the tedium of additional repetitions may lead to reduced attention to HWLs and weakened impact on attitude change (43).

- A study on U.S. adolescents, for example, found no substantial increase in awareness about HWLs over time from one school year to the next (19).

Some researchers have argued that the design of HWLs affects the degree to which messages are recalled and awareness of labels.

- Some studies have suggested that recall drops once the novelty of the labels wears off (43).
- The use of pictograms or color has been recommended to help raise awareness of labels and recall of messages (44–46).

It may be difficult to separate the impact of HWLs from other measures that may be implemented at the same time.

For example, the introduction of HWLs in the U.S. coincided with various other measures targeted at reducing drinking and driving, possibly confounding the effects of the drink-drive message (5, 19, 27).

However, any value in HWLs as a prevention tool is best viewed as part of a general effort to provide reminders, information, and education to consumers (5, 28).

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