The Drink Driving Situation in China
Ying Li a, Donghua Xie b, Guangmeng Nie c & Junhua Zhang a

a Health Human Resources Development Center of Ministry of Health, Haidian District, Beijing, P.R. China
b Maternal and Child Health Hospital, Changsha, Hunan, P.R. China
c School of Public Health, Peking University, Beijing, P.R., China

Available online: 29 Nov 2011

To cite this article: Ying Li, Donghua Xie, Guangmeng Nie & Junhua Zhang (2012): The Drink Driving Situation in China, Traffic Injury Prevention, 13:2, 101-108
To link to this article: http://dx.doi.org/10.1080/15389588.2011.637097

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.tandfonline.com/page/terms-and-conditions

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.
The Drink Driving Situation in China

YING LI,1 DONGHUA XIE,2 GUANGMENG NIE,3 and JUNHUA ZHANG1

1Health Human Resources Development Center of Ministry of Health, Haidian District, Beijing, P.R. China
2Maternal and Child Health Hospital, Changsha, Hunan, P.R. China
3School of Public Health, Peking University, Beijing, P.R. China

Objective: China has been concerned about the serious problem of drinking and driving road crashes, and it has made good progress by establishing strict laws, imposing serious penalties, and initiating a rigorous enforcement program since 2008. This study has assessed the magnitude and nature of the problem and reviewed the legislation, current practices, and institutional capacities for preventing drinking and driving.

Methods: Data and information were collected using existing reports and by consulting officials and experts from a number of agencies.

Results: Although there were no national statistics on levels of drinking and driving, random breath test surveys in 2 southern cities showed that between 4.5 and 4.6 percent of drivers were driving over the minimum legal blood alcohol concentration (BAC) limit of 20 mg/100 mL. Preliminary results from crash data also showed that at least 20 percent of serious road crashes were alcohol related in these cities. The national published figure for fatal crashes caused by drinking and driving was much lower, only 4 percent, but alcohol was not often identified as the main cause because of measurement difficulties. China’s legislation sets 2 BAC limits that are comparable with international norms. It has recently increased the penalties for drunk driving, the more serious of the 2 offenses, with a minimum driving ban of 5 years. The police are actively enforcing the laws through frequent roadside checking but they need more resources. Alcohol breath tests before and after a combined publicity and enforcement campaign indicated reductions of 87 and 68 percent of drivers over the legal limit in 2 southern cities.

Conclusions: China has made progress in strengthening its approach to preventing drinking and driving, particularly in the area of law enforcement. However, it is not possible to evaluate the potential benefits because of data issues. Recommendations for the future include the need to improve the national road crash and injury database, strengthen the coordination of key agencies, and provide more effective and sustained public information campaigns that target vulnerable drivers and are integrated with enforcement strategies. Evaluation and research are important to improve future prevention programs.

Keywords China; Drinking and driving; Alcohol consumption; Institutional capacity; Legislation; Enforcement

INTRODUCTION

Since opening up in 1978, China’s economy has grown rapidly. The gross domestic product (GDP) reached 3354 billion RMB (US$524 billion) by 2009. In addition, the number of motor vehicles and drivers and the size of the road network have increased at a similar pace and all have more or less doubled since the end of 2003 (Ministry of Public Security Traffic Administration Bureau [MPSTAB] 2010). By the end of 2009 the length of the road network had reached 3.86 million km with 65,000 km of highways; the number of motor vehicles was close to 187 million and drivers close to 200 million. Car ownership showed similar rapid growth and, according to data from National Bureau of Statistics (NBS 2009), by the end of 2009, the average number of cars per 100 urban families was 10.89. In some developed areas, this number already exceeded 20; for example, 29.55 in Beijing.

Since 1978 China’s alcohol production and consumption have been increasing annually. Beer is the most popular drink (90% of total consumption) and beer production grew linearly from 400,000 kL in 1978 to 41 million kL in 2008 (NBS 2009). Although alcohol production is high, the average consumption per capita is still lower in China than in many industrialized countries. According to data reported by the World Health Organization (WHO), the reported adult (15+ years) per capita consumption in liters of pure alcohol of beer, wine, spirits, and other drinks in China was 4.4 (2005), 1.83 (2007), 0.15 (2005), 2.51 (2005), and 1.26 (2007), respectively, compared with 8.48 (2005), 4.58, 1.44, and 2.76 in 2007 in the United States. It is not clear how much these figures would be increased by the
consumption of unlicensed alcohol beverages and therefore these comparisons need to be treated with some caution. China also imposes a consumption tax on alcohol products to control drinking levels, bans the selling of alcohol to minors under the age of 18, and regulates advertising to ensure a responsible commercial approach.

Given the rapid increase in motor transport and the growth in alcohol consumption, there is concern in China about the likely contribution of alcohol to road traffic crashes and injuries. The aim of this study was to carry out an objective situational assessment of the drink-drive situation in China. The key objectives were to (1) assess the magnitude and nature of the drink driving problem in China using existing data; (2) determine China’s institutional capacity to deal with the problem by reviewing the strengths and weakness of the current prevention practices including data systems, policies, legislation, and interventions; and (3) make recommendations for strengthening the prevention program in the future.

**METHODOLOGY**

The assessment methodology was based on guidelines developed by the International Center for Alcohol Policies (ICAP) using the approach described in the good practice manual on drinking and driving (Global Road Safety Partnership [GRSP] 2007). The ICAP methodology is discussed in more detail in the article on situational assessments earlier in this issue (Johnson 2012). Data were collected from reports identified by searching the China Knowledge Resource Integrated Database (CNKI), statistical yearbooks, various recommended publications, and research documents. Additional information was obtained from government Web sites and by consulting approximately 20 professionals from international organizations, the traffic police and public security department, road safety agencies, health departments, insurance companies, and international alcohol beverage companies. The assessment has relied heavily on published/official information and, where possible, this information has been cross-checked to minimize errors. Any views stated without any direct reference to another source are the opinions of the authors and not those of any other person or agency.

**DRINKING AND DRIVING SITUATION**

**Data Sources**

There are 2 official sources for current road crash and casualty statistics. The first source is the Ministry of Public Security (MPS) Traffic Administrative Bureau’s yearbook (MPS 2005–2010) on the national road crash situation. The information for this annual report comes from the police road crash database, which aggregates the summary records of all investigated road crashes. These reports include an analysis of trends in motor vehicle registration, driver’s licenses, and highway mileage as well as road crash information. The second source is the Chinese Center for Disease Control and Prevention (CDC) reports (Chinese Center for Disease Control and Prevention 2004–2008). These analyze data from the National Disease Surveillance System, which currently covers about 6 percent of the total population. The sample includes all cases registered in 161 counties (regions) of 31 provinces (autonomous regions, municipalities), representing a population totaling over 73 million people. So far, the CDC (2004–2008) has issued 5 data reports on causes of death from 2004 to 2008. The next section provides a summary of the statistics obtained from these and other sources, including comments on any data quality issues.

**The Extent and Nature of the Problem**

According to the 2003 to 2009 MPS yearbooks, the numbers of road crashes and fatalities and the mortality rate (fatalities per 100,000 people) reached their peak during 2002 to 2004. In 2002, there were 773,137 road crashes, 103,810 people died, and the mortality rate was 8.79 per 100,000 people. Since then these MPS figures have steadily decreased, and in 2009, 67,759 people were killed and the mortality rate per 100,000 people was 5.1 (Table I).

However, the CDC health data (Table I) indicate that the magnitude of the problem is actually much worse; for example, the estimated number of deaths in 2007 and 2008 and the mortality rates in general were about double those in the MPS report and the drop in deaths since 2004 was much less than reported by the MPS.

In addition, a study comparing road traffic mortality rates from police-reported (MPS) data and death registration data (Hu et al. 2011) showed similar results to the CDC comparison and the authors concluded that the widely cited downward trend in road traffic mortality based on police data was not upheld by the death registration data.

Clearly it is important for policy makers and decision makers to recognize and understand these differences between the data sources and not just rely on MPS data. The 2 main reasons for the discrepancies are as follows:

1. These 2 systems use different definitions of death. The MPS classifies a crash as fatal if a victim dies with 7 days, whereas the health department’s surveillance system allows a much longer period for a death to be recorded (no official limit).
2. Road crashes including those that were fatal may have been underreported in MPS data because they happened outside the public road jurisdiction and also because a new performance index for measuring safety at work could influence reporting to meet annual reduction targets (State Administration of Work Safety 2008).

There is no national statistic available on the drinking and driving rate in China. However, data are available from a drink-drive project (Li et al. 2009) initiated by the Global Road Safety Partnership (GRSP) in 2 southern cities in Guangxi Province from 2006 to 2009 (see Box 1, Project Summary). Box 1 The random breath test results of over 10,000 drivers indicated that between 6.8 and 6.9 percent had been drinking and between
issues. Insurance coverage for drink-drive crashes caused a number of police interviews also suggested that drink-drive crashes (98.6%), and private cars (97.4%; Zhang et al. 2009). The traffic and involved drivers aged 30 to 49 years (72%), male drivers that drink-driving crashes typically occurred after dinner (70%) and cause greater damage (Li et al. 2008). According to a 2009 newspaper article, a traffic police department survey indicated Alcohol-related crashes also tended to involve more vehicles and fatal crashes prior to the intervention were alcohol related. These figures are similar to those of the European Union, which reported that 30 to 40 percent of driver fatalities were related to drinking and driving (European Transport Safety Council [ETSC] 2008). However, they are markedly different from those in the MPS annual reports for China, which indicate that less than 3 percent of road crashes and around 4 percent of fatalities were caused by drink driving (see Table II). Unfortunately, the police can only identify one leading cause for each crash on the data form, though most crashes have multiple causes. This, together with the lack of routine alcohol testing of drivers in crashes, means that the MPS data are likely to underestimate the drink-drive problem. The 2 cities’ data can provide a better estimate of the problem in those cities and can be used to monitor the impact of interventions (see Evaluation section and Box I, Project Summary), but it cannot be used to estimate the national situation.

The MPS annual reports have no additional details on alcohol-related crashes. Roadside surveys in the Guangxi project indicated that drivers who were most likely to drink and drive were males aged between 45 to 50 years who claimed to be used to drinking and driving (Fang 2009). Crash data from the same project indicated that those in the 30- to 39-year-old age group were most likely to drink and drive and that the highest risk time was between 4:00 p.m. and 3:00 a.m. Alcohol-related crashes also tended to involve more vehicles and cause greater damage (Li et al. 2008). According to a 2009 newspaper article, a traffic police department survey indicated that drink-driving crashes typically occurred after dinner (70%) and involved drivers aged 30 to 49 years (72%), male drivers (98.6%), and private cars (97.4%; Zhang et al. 2009). The traffic police interviewed also suggested that drink-drive crashes often involved speeding and hit and run and that the lack of insurance coverage for drink-drive crashes caused a number of issues.

### Table I  Road traffic fatalities: A comparison of CDC and MPS data

<table>
<thead>
<tr>
<th>Year</th>
<th>Total fatalities</th>
<th>Fatality rate per 100,000 people</th>
<th>Estimated national fatalities (Rate × Population)</th>
<th>MPS police data—national figures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fatality rate per 100,000 people</td>
<td>Total national fatalities</td>
</tr>
<tr>
<td>2004</td>
<td>10,815</td>
<td>15.20</td>
<td>197,582</td>
<td>8.24</td>
</tr>
<tr>
<td>2005</td>
<td>10,929</td>
<td>15.29</td>
<td>199,926</td>
<td>7.60</td>
</tr>
<tr>
<td>2006</td>
<td>8290</td>
<td>12.56</td>
<td>165,098</td>
<td>6.84</td>
</tr>
<tr>
<td>2007</td>
<td>10,384</td>
<td>14.53</td>
<td>191,983</td>
<td>6.21</td>
</tr>
<tr>
<td>2008</td>
<td>10,538</td>
<td>14.01</td>
<td>186,066</td>
<td>5.56</td>
</tr>
<tr>
<td>2009</td>
<td>—</td>
<td>—</td>
<td>184,046</td>
<td>5.1</td>
</tr>
</tbody>
</table>


4.5 and 4.6 percent were over the minimum legal blood alcohol concentration (BAC) limit of 20 mg/100 mL in the period before the start of an intensive enforcement and publicity campaign. Police crash data from this project also indicated that 25.7 and 48 percent of the serious (one or more victims hospitalized) and fatal crashes prior to the intervention were alcohol related. These changes included the introduction of 2 legal limits for BACs in 2004 with the lowest at 20 mg/100 mL (see Table III).

However, there was growing concern from the MPS and other agencies that the penalties under the administration regulations were not severe enough to act as a major deterrent. The process of changing the sanctions began in 2009 when the Supreme Court opened a media conference about drinking and driving and the “fight against drinking and driving” became one of the hottest legal issues. The Court announced that drivers who cause serious injuries and deaths after drinking and driving and/or hit and run crashes will be convicted and punished with the “crime of endangering public safety” according to 115th item in the Criminal Law (The Central People’s Government of the People’s Republic of China 2008). These changes included the introduction of 2 legal limits for BACs in 2004 with the lowest at 20 mg/100 mL (see Table III).

### INSTITUTIONAL CAPACITY

#### Policies, Laws, and Sanctions

The Chinese government showed its determination and commitment to tackling road safety in 2003, when the fifth conference of the 10th People’s Congress passed a new law on road traffic safety. This was supported by the state council and the MPS. In 2010 this law and legal framework was further strengthened and a large number of new regulations and standards were issued to improve road safety administration (The Central People’s Government of the People’s Republic of China 2008). These changes included the introduction of 2 legal limits for BACs in 2004 with the lowest at 20 mg/100 mL (see Table III).

### Table II  2001 to 2009 Motor vehicle crashes caused by drinking and driving (MPS)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of crashes</th>
<th>Proportion of all crashes (%)</th>
<th>Number of fatalities</th>
<th>Proportion of all fatalities (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>10,525</td>
<td>1.39</td>
<td>3280</td>
<td>3.1</td>
</tr>
<tr>
<td>2002</td>
<td>10,314</td>
<td>1.33</td>
<td>3368</td>
<td>3.08</td>
</tr>
<tr>
<td>2003</td>
<td>11,000</td>
<td>1.65</td>
<td>3937</td>
<td>3.77</td>
</tr>
<tr>
<td>2004</td>
<td>11,959</td>
<td>2.31</td>
<td>4658</td>
<td>4.35</td>
</tr>
<tr>
<td>2005</td>
<td>12,250</td>
<td>2.72</td>
<td>4715</td>
<td>4.78</td>
</tr>
<tr>
<td>2006</td>
<td>9442</td>
<td>2.49</td>
<td>3763</td>
<td>4.21</td>
</tr>
<tr>
<td>2007</td>
<td>8752</td>
<td>2.67</td>
<td>3435</td>
<td>4.21</td>
</tr>
<tr>
<td>2008</td>
<td>7518</td>
<td>2.83</td>
<td>3060</td>
<td>4.16</td>
</tr>
<tr>
<td>2009</td>
<td>5969</td>
<td>2.5</td>
<td>2665</td>
<td>3.93</td>
</tr>
</tbody>
</table>
Box I Baseline Survey of the GRSP Drinking and Driving Intervention in Guangxi

Project Summary: Baseline Surveys of Drinking and Driving in Nanning and Liuzhou, Guangxi Province, China

The Global Road Safety Partnership (GRSP) carried out a drinking and driving project in the two cities of Nanning and Liuzhou in Guangxi province during 2006–2009 (see http://www.GRSRoadsafety.org). The project was divided into three stages: (a) baseline surveys to understand the nature and scope of the problem (December 2006–July 2007); (b) targeted interventions based on the findings of the surveys to reduce drink driving behaviors and the related crashes, fatalities and injuries on the road (August 2007–November 2008); and (c) postintervention surveys to evaluate whether the countermeasures used in the intervention were effective (December 2008–July 2009). This summary focuses on the baseline surveys and provides some postintervention results.

Objective: To understand the prevalence of drinking and driving and alcohol-related crashes in the cities of Nanning and Liuzhou.

Methods: The baseline surveys included both roadside surveys and a crash survey. They were organized jointly by the Health Human Resource Development Center of Ministry of Health of China, GRSP, The World Health Organization (WHO) and local partners in the two cities, which included the local health sector (Guangxi Institute of Occupational Diseases in Nanning and Center for Disease Prevention and Control in Liuzhou) and the local traffic police.

In the roadside survey, motor vehicle (including motorcycles) drivers were randomly stopped by the police for a breath test and interview; in the crash survey, all drivers involved in a road crash resulting in at least one person killed or seriously injured were requested to provide a blood sample. These surveys were repeated again after the intervention.

Results: According to the national standard in China (GB19522-2004), the offense of drinking and driving applies to drivers with a BAC between 20 and 80 mg/100 mL and drunk driving to those with a BAC in excess 80 mg/100 mL.

A total of 10,685 drivers were breath tested (100% of the intercepted drivers) and 10,666 of these drivers were interviewed before the intervention. Seven hundred thirty (6.8%) of these drivers were BAC positive (BAC > 0); 245 (2.3% of all drivers) had BACs below 20 mg/100 mL; 415 (3.9% of all drivers) were drinking and driving (20–80 mg/100 mL); and 70 (0.7% of all drivers) were drunk driving (≥80 mg/100 mL). Overall, 4.6% of the drivers had BACs over 20 mg/100 mL (the minimum legal BAC limit in China). The interviews indicated that only 4.8% were aware of the minimum BAC limit; 24.9% had been discouraged by other people from driving after drinking; 78% had never been stopped by the traffic police for a BAC check during the last 2 years (2005–2006), and only 0.3 percent had been punished for drinking and driving.

The crash survey results revealed that, on average, 34.1 percent of road crashes (Nanning: 25.7%; Liuzhou: 48%) were alcohol related; the mean BAC level of the drivers who were involved in the crashes was 156.7 mg/100 mL and the highest level recorded was 310 mg/100 mL.

Conclusions: Valuable information was obtained from the baseline survey, providing a better understanding of the local drinking and driving situation in the two cities. The findings showed that drinking and driving was a major issue in both cities and confirmed the need for an effective and targeted intervention.

A combined enforcement and public education campaign was carried out in the two cities during May to November 2008. After this campaign the BAC positive rate declined from 6.8 to 0.9 percent in Nanning and from 6.9 to 2.2 percent in Liuzhou (from roadside breath testing results). The proportion of serious alcohol-related road crashes was reduced from 25.7 to 20.5 percent in Nanning and from 48.0 to 28.8 percent in Liuzhou according to postintervention crash data from December 2008 to September 2009.

1Prepared by Ann Yuan, GRSP, Beijing.

for drinking and driving under both criminal and administration codes (see Table III). Currently the minimum penalty for the lesser offense of drinking and driving is loss of license for 6 months and a fine, and for drunk driving it is loss of license for 5 years and a fine. Drinking and driving or drunk driving resulting in a serious crash can lead to loss of license for life (The Central People’s Government of the People’s Republic of China 2010).

Enforcement

The traffic police department under the MPS is the main agency for traffic law enforcement in China. In recent years the traffic police have considerably increased their enforcement capacity and there are currently over 127,000 police patrolling China’s roads. Since 2004, it has been reported that they prosecuted on average 19 million speeding, 1 million drinking and driving, and 3.2 million driving without license cases each year. Over
the same period the number of road crashes (MPS data) due to such violations dropped on average by over 10 percent per year (Meng 2010). However, as shown above, the MPS data cannot be used for evaluation on their own and it is not possible to form a conclusion regarding the benefits of this increased enforcement.

The traffic police rigorously enforce drink driving through random breath testing at roadside checkpoints. Initially the tests were part of a wider traffic law enforcement strategy; for example, in 2006, 650,000 people were prosecuted for drinking and driving out of the 130 million traffic offenses detected (MPS 2009). More recently the MPS has organized intensive enforcement campaigns specifically on drinking and driving. In the last 4 months of 2009, testing was carried out at 160,000 checkpoints by over 7 million police. This resulted in the prosecution of 304,000 drivers, of whom 41,000 (13.6%) were found guilty of the more serious offense of drunk driving. All of the drivers were fined, 273,000 licenses were temporarily suspended, and 37,000 drivers were put in custody. It was also reported that the number of fatalities from road crashes dropped during the campaign by 39.6 percent compared to the same period for the previous year (The Central People’s Government of the People’s Republic of China 2006) and (2) started in 2006 coordinated by the MPS (The Central People’s Government of the People’s Republic of China 2011) to form a conclusion regarding the benefits of this increased enforcement.

Table III

<table>
<thead>
<tr>
<th>Date and title</th>
<th>Key content related to drinking and driving</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004, National Standard GB19522–2004: BAC limits and measurement (Zhao et al. 2007)</td>
<td>2 levels of offense:</td>
</tr>
<tr>
<td>2010, Motor Vehicle Driver’s License Application and Use Regulation: revised penalty points system (State Administration of Work Safety 2011)</td>
<td>Drinking and driving, BAC ≥ 20 mg/100 mL and ≤ 80 mg/100 mL. Drunk driving BAC ≥ 80 mg/100 mL. Penalty for drunk driving or drinking and driving a commercial vehicle is 12 points. Otherwise, penalty for drinking and driving is 6 points. Drivers whose scores have reached 12 points must take a 7-day traffic safety education class and a test within 20 days</td>
</tr>
<tr>
<td>2011, Criminal Law Amendment (8): criminalization of drunk driving (The Central People’s Government of the People’s Republic of China 2011)</td>
<td>Drunk drivers can be imprisoned and fined</td>
</tr>
<tr>
<td>2011, The modified Law on Road Traffic Safety 91st item: penalties for dangerous driving and drinking and driving</td>
<td>Penalties specified as follows:</td>
</tr>
<tr>
<td></td>
<td>Drinking and driving—loss of license for at least 6 months and 1000 to 2000 RMB (US$156–US$313) fine</td>
</tr>
<tr>
<td></td>
<td>Drunk driving—detainment until sober, loss of license for at least 5 years, and he who has violated the criminal law shall be prosecuted according to law</td>
</tr>
<tr>
<td></td>
<td>Drinking and driving a commercial vehicle—detainment up to 15 days, loss of license for at least 5 years, and 1000 to 2000 RMB (US$156–US$313) fine</td>
</tr>
<tr>
<td></td>
<td>Drunk driving a commercial vehicle—detainment up to 15 days, loss of license for at least 10 years, ban from driving commercial vehicles for life, and he who has violated the criminal law shall be prosecuted according to law</td>
</tr>
<tr>
<td></td>
<td>Drinking and driving or drunk driving proven to cause a serious crash will lead to a ban from driving for life</td>
</tr>
</tbody>
</table>

problems with organizing blood tests for drivers who refuse a breath test; lack of cooperation from and “pulling strings” by some VIPs; avoidance of sanctions by some drivers, especially motorcyclists; and risks to police from assault by drunk drivers and from stopping vehicles at night.

Mass Media Campaigns and Education

Much of the road safety publicity effort is led by the police, and their promotion work has increased in recent years, especially with the launch of the intensive drink-drive enforcement program in 2009. Many promotional activities have been developed and coordinated at the provincial and city level, but there has been less activity at the national level. National campaigns aimed at a more general road safety improvement have included (1) “Protect Life, Travel Safely,” a traffic safety education project started in 2006 coordinated by the MPS (The Central People’s Government of the People’s Republic of China 2006) and (2) the First United Nation Global Road Safety Week, China Series, held in 2007 led by the Ministry of Health (MOH), where over 70 million promotional materials were distributed and over 120 million people participated (MOH 2007).

Public ceremonies and media activities have been used to launch intensive enforcement programs; for example, the police in Shanxi Province displayed wrecked cars, distributed leaflets, and involved the media to promote the theme “Cherish Life, Refuse to Drink and Drive” at the start of their enforcement program in 2009. There are few education programs about drinking and driving at schools and colleges, but the traffic police make regular visits to schools and in 2009 they organized a program “Small Hands With Big Hands, Refuse Drinking and Driving”
(China Report 2010). There have also been many examples of campaigns run by nongovernmental organizations and the alcohol beverage industry; some of these are outlined in the next section.

China has perhaps underused the mass media in its campaign against drinking and driving, and some of the likely reasons for this include a lack of funds, inadequate cooperation between key government departments, a lack of knowledge about good practice, and a low priority for road safety promotion work because it is not linked directly to any government performance incentives.

Other Intervention Programs

In recent years, both international and local companies, particularly those in the alcohol beverage industry, have participated in activities deterring drinking and driving and advocating socially responsible drinking because they perceive the benefits of creating their own more responsible images. Some examples include the following:

1. Adoption of advisory warning labels on packaging and in commercials.
2. Joint alcohol beverage company and China Road Safety Association campaign “Say No to Drinking and Driving,” which started in Shanghai and Guangzhou and has now expanded to other areas. The program includes promotional materials, competitions, education Web sites, Internet surveys, and public service advertisements.
3. Alcohol beverage company-led “Guardian Angel” campaign that distributed “If You Drink, Don’t Drive” promotional materials and advocated for designated drivers.

The insurance industry also attempts to discourage drinking and driving by not paying claims for crashes if they find evidence of drinking and driving, but it is not known how effective this measure is as a deterrent. As yet insurers have not been active in funding promotional campaigns against drinking and driving.

Evaluation and Research

One before-and-after study with a control group has been carried out to measure the impact of a combined publicity and enforcement campaign against drinking and driving. The evaluation was part of the drink-drive project organized jointly by the MOH’s Health Human Resource Development Center and the GRSP with support from the WHO (see Box 1, Project Summary). Road crash and random breath test data were compared for the 2 southern cities involved before and after the intervention together with similar data over the same period for a control city. The results from a preliminary analysis (full analysis not yet completed) showed a drop in severe alcohol-related crashes in these 2 cities from 25.7 and 48 percent in 2007 before the intervention to 20.5 and 28.8 percent in 2009 after the intervention. Breath test surveys showed reductions of 87 and 68 percent for drivers over the minimum limit in the 2 cities compared to an increase of 61 percent in the control city, which had no intervention (Li et al. 2009).

With the exception of this study the authors could find no other research into drink driving interventions in China, and generally there has been little behavioral research into drinking and driving. The literature search indicated that there have been 2 articles on the effects of alcohol on driving performance (Le et al. 1999; Le 2011) and one on BAC levels with time (Jia 2009). In addition, there have been a small number of studies of alcohol drinking behavior of special groups such as adolescents.

More general road safety research has been supported jointly by Ministry of Technology, the MPS, and the Ministry of Transport under the “National Road Traffic Technology Project.” This large national traffic safety research program has a strong research team with experts from different traffic and road safety research institutions, focusing on technology integration and its large-scale application. It aims to produce many standards and regulations by the end of 2011 for direct application to road traffic and safety administration, design, manufacturing, and engineering. One of the planned outputs of this project is publicity and teaching materials for traffic safety including the theme of drinking and driving.

Stakeholders, Leadership, and Coordination

In 2003 the State Council established a joint conference mechanism for coordinating road safety policy and the activities of 18 key ministries and departments (Ministry of Science and Technology 2008). The designated lead agency is the MPS and it organizes an annual meeting to discuss actions and crash reduction targets. Such meetings can also be organized at the provincial and municipal level and at additional times, if necessary. As with other countries, different ministries have their own budgets and independent decision-making and planning processes and this together with the lack of a multisectoral road safety action plan makes coordination more difficult. The MPS is responsible for administering driver and vehicle licenses as well as the improvement and enforcement of traffic laws. It also coordinates rescue operations with the fire and health services and conducts crash investigations. The Ministry of Transportation is responsible for the development, maintenance, and safe condition of the road network. Details of the other agencies involved are available from the unpublished ICAP report on China (Li et al. 2010).

The MPS also leads the coordination of other agencies, especially at the local level, and they work with important community organizations—for example, the Women’s Federation to encourage drivers and their family members to avoid drinking and driving; trade unions and youth leagues to establish road safety volunteer teams; and industry administration associations, alcohol beverage companies, and bars and restaurants to encourage designated driver schemes and organize promotional activities against drinking and driving.

The MPS has demonstrated that it can design and implement drink-driving enforcement campaigns including promotional activities. The assessment has indicated that
improvements could be made by using the mass media more effectively and by incorporating evaluation into the campaign process. In the GRSP 2 cities project described above, cooperation was facilitated by the development of a project plan with a clear schedule of activities agreed upon by participating stakeholders, including an evaluation. Such a planning process could help future integration of drink-drive prevention activities and encourage evaluation, although agreeing on budget allocations could still be a major challenge.

CONCLUSIONS

This study has shown that China has made substantial progress in its approach to tackling drinking and driving by establishing strict laws, imposing serious penalties, and initiating a rigorous enforcement program. However, it is not possible to draw any conclusions regarding the effectiveness of this program because death registration data did not show the same downward trend in recent years as the MPS data. The assessment also identified a number of challenges including the lack of BAC data to identify national levels of drinking and driving, differences between health and police data on road crash fatalities, insufficient multisectoral planning of road safety actions that could aid interministerial coordination, and some capacity and resource issues within the police and public information/education services. Key recommendations based on consultations with stakeholders include improving the data systems by linking health and police crash data; improving the crash costing information and using it for road safety investments decisions; developing more effective educational and promotional approaches, especially for adolescents and vulnerable groups; increasing police resources for drink-drive enforcement; improving the integration and coordination of measures against drinking and driving, including the development of multisectoral action plans; and increasing research, especially the study of high-risk groups and the evaluation of drink-drive interventions.

ACKNOWLEDGMENTS

This study was funded by the International Center for Alcohol Policies (ICAP). The authors thank Andrew Downing for assistance in editing and reorganizing the article. Thanks also to Brett Bivans and Shushanna Mignott from ICAP and Ann Yuan from GRSP for their generous support. We appreciate those who agreed to share their ideas through interviews, including traffic police officers in the cities of Changsha (Hunan Province), Nanning and Liuzhou (Guangxi Province), Guangdong Province, and Zhejiang Province; experts on traffic management, transportation, and injury prevention; as well as representatives from the alcohol beverage industry.

REFERENCES


Fang L. *Changsha Drinking and Driving Rate and Its Relative Elements* [master’s thesis]. Changsha City, Hunan Province: Central South University; 2009.


