Introduction

Over the past 15 years, Viet Nam has experienced increased economic growth resulting from the country’s transition to a market economy. As a result of its economic development goals, the Vietnamese government has mobilised considerable resources from its own budget, and from donors, to build transportation corridors, new and renovated roads, and more efficient border crossings. The mobile workers along highways, including truck drivers, are strongly affected by this development of transportation infrastructures.

In response to the particular health needs of truck drivers, the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) initiated the “Health without Borders – Improving health and reducing HIV/AIDS vulnerability among long-distance road transport workers through a multi-sectoral approach” project in Cambodia, Thailand, Viet Nam, and Laos. As there has been very little research with truck drivers, except for a few specifically HIV-related studies, the first component of the project was a study of mobile populations, primarily truck drivers, which was carried out in all four countries. In Viet Nam, UNESCAP partnered with the Ministry of Transport and IOM to conduct a baseline assessment of Truck Driver Knowledge and Behaviours along Three Transport Corridors in Viet Nam.

The paper presents a part of the survey on risky behaviours of Vietnamese truck drivers on these three Asian Highways.

The research was conducted in three geographical regions (north, central and south) based on the major Asian cross-border highways. It used both qualitative and quantitative methods. The quantitative study used convenience samples to collect specific information on truck drivers along selected sites of the three highway corridors. The selection of the study sites was based on mapping truck stops and places where drivers stop for food and accommodations along the defined highways. A convenience sample was selected as there were not enough resources to conduct a comprehensive cross-sectional survey with the mobility of drivers and the time schedules of drivers. The quantitative study was conducted with 191 long-distance truck drivers selected because of their availability at defined sites along the highways. In addition, 72 in-depth interviews and 35 focus group discussions were conducted.

The research was conducted along three primary cross-border routes of the GMS.

AH14: The 450-kilometer northern corridor runs from Haiphong, through Hanoi and Lao Cai, Viet Nam to Kunming, China. The portion of the route from Haiphong to Hanoi is National Highway 5, which has received upgrades over the past seven to eight years resulting in good road conditions. Along this section of the road, there are many accident rescue stations and resting areas for drivers.
AH16: The central corridor, also known as “The East–West Corridor,” connects three countries – Viet Nam, Lao PDR, and Thailand, with expectations to extend into Myanmar. Updates on this 260-kilometer route have occurred over the past four to five years and the road condition is good. It is considered an essential corridor for transportation, tourism, and trade in the region. The route runs through some of Viet Nam’s less developed provinces and directly links them with the border trade zone, the new industrial zone and airport of Chu Lai just south of Danang), as well as Lao and Thailand.

AH1 – The southern corridor runs from Vung Tau, Viet Nam through Ho Chi Minh City and Moc Bai to Phnom Penh, Cambodia. This route is being further extended to reach Bangkok’s trading centre and sea port. This corridor crosses Ba Ria, Vung Tau, Dong Nai, Ho Chi Minh City, and Tay Ninh provinces – all of which are in lowland areas. This corridor has been considerably renovated over the past three years and private health clinics, district health stations, and provincial hospitals are located along the route. As the corridor is only 190 kilometres, drivers generally do not stop for rests along the route.

Findings

Overall remarks
Long-distance truck drivers are very mobile and spend a substantial portion of their time on the road. They have to drive heavily-loaded trucks, and travel long distances through different regions. Some need to stay overnight in neighbouring countries as they drive goods across borders. The study showed that long-distance truck often had to drive over night. Most drivers reported trips generally lasted 3-7 days and that average time of uninterrupted driving was six hours (although drivers reported driving uninterrupted for as long as 12 hours). Driving was often at night to avoid police checkpoints and to reduce the time spent on each trip, thus increasing the number of trips and pay. Most of the drivers had to frequently stay overnight and almost 85 percent reported regularly sleeping in their trucks to protect their truck and load. Close to 65 percent of drivers frequently drove to border crossings and across borders with heavily ladened trucks. The long-distance, overnight driving contributed to frequent tiredness, which affected their health and safety.

Frequent travel reduced their access to quality health services and information from health providers. The time away from home, the nature of the job, and the lack of appropriate public health information have resulted in various risky and unhealthy behaviours including unsafe sex, alcohol consumption, and smoking.

Smoking
Of the 191 interviewees 64 percent smoked daily. (28 percent reported being non-smokers.) A woman working in a hotel stated:

Most of them smoke. I asked them why they smoke so much, they answered that it was because they get sleepy when driving. Cigarette and coffee were always available in the truck to help them stay awake. They often smoke one or two packs a day. (Hotel Employee)
Amongst the daily smokers, approximately 50 percent reported smoking 10 to 20 cigarettes a day and 20 percent reported smoking over 20. Just over 25 percent reported six to ten per day and four percent reported smoking under five cigarettes daily.

Most of us are addicted to smoking. Driving makes us sleepy, especially on the newer, convenient roads. We must smoke to keep awake and in control. (Driver)

I normally smoke one pack, and more than one, maybe one and a half or two if travelling at night (Driver)

Drug use
Only two drivers reported ever using drugs and both reported having used opium. During the in-depth interviews, most of drivers thought that drug use was not common among long-distance truck drivers as they could be fired by their companies and they lacked adequate disposable income to purchase drugs.

I have never seen anyone in this company taking drugs. They will be fired immediately if they are involved with drugs. They would then be out of money. (Driver)

Focus-group discussions with local authorities, and communities, in the north and south indicate that heroin and diazepam are available and that driver who do use drugs, smoke so that they are not identified as drug users by injection scars on their skin. A sex worker in the south stated that drivers buy heroin in Lao for personal use or malaria and know well where to buy it. Lao Cai discussion respondents also stated that processed drugs like heroin are common. Lao Cai police stated they have arrested truck drivers using heroin. Several drivers stated that drug-using drivers inject drugs because they do not have time to smoke, indicating that some drivers are intravenous drug users.

Alcohol Use
Alcohol use was considerably more common with 30 percent of drivers reporting daily consumption of alcohol and 30 percent reporting drinking at least once a week. Drivers in the north and central sites reported considerably more daily alcohol consumption than drivers in the south. Drivers who reported drinking daily or frequently were four times more likely to sleep with sex workers than drivers who
reported not drinking or drinking infrequently (p<0.001; OR=4). Truck drivers away from home for longer periods of time report more alcohol consumption.

During discussions drivers stated that some drivers keep alcohol in the cab of the truck.

Yes, I do drink when I have free time. We have an unsocial working timetable and job. For example, tonight I start from 8:30 p.m. so I am free in the afternoon with nothing to do. At that time, it is too difficult to sleep so we must have something to do such as drinking alcohol to get tired to sleep. Then, after some hours, we get up to load goods. (Driver)

Sexual behaviour

Ninety percent of the drivers reported the age of first sex was below 25 years of age. Twenty percent reported being under the age of 20 and 70 percent reported being between 20 and 25. The average first age was 21.5 years and the range of years went from 15 years to 30. Approximately half of the drivers reported their first sexual partner was their girlfriend and 40 percent of said it was their wife. Three percent said their first partner was a casual girlfriend and the same said a sex worker.

In the past twelve months, 80 percent of drivers reported having sex with their wives (or 99 percent of the married drivers). Fifteen percent reported sex with steady girlfriends, 30 percent with casual girlfriends, and 40 percent with sex workers.

Similarly, in the past month 90 percent of drivers reported having sex with their wives or steady girlfriend, 30 percent with casual girlfriends and close to 40 percent with sex workers. In the month before the research, 69 percent of drivers reported having one partner and 29 percent reported having two sexual partners. Four drivers reported having three partners and one driver reported having five.

Close to five percent reported not having sex in the last month. None of them reported ever having had sex with other men.

The nature of our job is to travel here and there. We have to spend most of nights away from home, so we sometimes look for small fun. Moreover, when drunk, it is easy to follow your friend to have sex. (Driver)

The research shows there is a relationship between fatigue and exhaustion and multiple sex partners (p=0.03). Over 33 percent of truck drivers who reported fatigue
during long driving distance also reported having multiple sex partners. The percentage of drivers who reported fatigue and have multiple sex partners is two times higher than drivers not reporting fatigue. This sexual behaviour may be a result of drivers finding places to rest such as guest houses, small restaurants, and cafes. Focus group discussions indicate that drivers visit sex workers in mid-afternoon when they can rest and drink. Similarly, both drivers and the communities that drivers stop in say that drivers tend to have two, three or many regular girlfriends.

Condom Use
Sixty percent of drivers report condom use with wives and regular girlfriends. Approximately 20 percent reported rarely using them and 20 percent reported frequently using condoms. The main reasons for not wearing condoms with their wife or steady girlfriend was because it was not felt to be necessary (45 percent.) Over 30 percent stated that they used other methods to avoid pregnancy, 26 percent trusted their wife or girlfriend, and six percent wanted to have a baby. Just over five percent said they do not use condoms because they do not like them.

Condom use amongst casual girlfriends increased with 33 percent reporting never using condoms and 65 percent reporting occasional or frequent use. Reported condom use from northern drivers was considerably higher than from central southern drivers.

During last sex with a casual girlfriend, 68 percent of the 31 respondents stated they did not use a condom. One-third of the drivers reported not using a condom because they were using another method of contraception and one-third said condoms were not necessary. Approximately 40 percent said that condoms were not available and nine percent said they did not know where to buy them. Almost 20 percent said they did not like them and five percent said their partner did not like them.

At the time, where do you find a condom? (Driver)

Seventeen percent of the 64 drivers reporting having sex with sex workers in the past month also reported not using a condom. Almost 72 percent reported frequent condom use and ten percent reported using condoms occasionally. Of truck drivers reporting having sex with sex workers and who are absent from home over seven days at a time, almost 70 percent report of them report not using, or only sometimes using, a condom. There were regional differences in reported condom use with the central
(46 percent) and southern (15 percent) regions reporting never using condoms with
sex workers and no northern driver reporting that they never use condoms. In the last
time having sex with sex workers, only 18 people responded of which 11 reported not
using a condom and 7 reported using one. Of 11 drivers reporting having sex with sex
workers without condoms, eight said they do not use them because they dislike
condoms.

*I sometimes see that drivers have their own interests. They have unusual
condoms.* (Sex worker)

*In fact, condoms are available but they do not want to use them, and since we do
not have to use condoms we sometimes have risky sex.* (Sex worker)

**HIV and STIs**

Although 95 percent of drivers knew of HIV, there were serious disconnects between
knowledge and protective behaviour. Almost 17 percent of drivers did not know or
felt that condoms did not help prevent HIV and 23 percent did not know or thought
people can be infected through mosquito bites. When asking about the ways to
prevent HIV, most drivers (70 percent) knew not to share syringes, but fewer than 50
percent knew of any other correct ways to prevent HIV. This lack of information or
translating knowledge into behaviour places the drivers, and their sexual partners –
particularly their wives or steady girlfriends – at risk. Drivers reported increased risk
behaviour from exposure to the sex industry when away from home and complaining
of back, shoulder, back, and neck pains and visiting massage parlours and karaoke
bars. In discussions and interviews, drivers acknowledged having two, three and more
casual partners who are regular girlfriends, which is important as condom use drops
considerably once the sexual partner is considered regular and trusted. While some
girlfriends are women who were never sex workers, studies with sex workers and
clients in Hanoi and Danang indicate that the progression from sex worker to casual
partner can often mean having met as few as two to three times. Drivers report that
condom use is often based on ‘mutual trust’ rather than potential risk. In discussions,
younger drivers reported changing their casual partners more regularly than older
drivers.

Among the 191 drivers in the study, 30 percent said that they had been tested for HIV
and almost 85 percent of the tests had been conducted within the past two years. Of
the 136 who had not had an HIV test, 75 percent believed they did not have HIV.
Twenty percent never thought about getting a test, and three percent did not know
what an HIV test was. Of those who had had an HIV test, half had it voluntarily and
half were required to by their company or part of their medical exam. (An HIV law
passed in 2006 will make mandatory testing illegal.) Over 75 percent of drivers who
had had a test reported that there had been no pre-test or post-test counselling but 87
percent were informed the results.

Of all the interviewed drivers, 83 percent stated that wearing condoms could protect
people from HIV infection. 17 percent of them said that condoms were not protective
or they did not know if they were protective. Seventy percent of drivers believed that
having only one sexual partner (who does not have HIV) would prevent HIV
transmission. 93 percent reported that sharing syringes could transmit HIV. Almost 90
percent of drivers stated HIV is not transmitted by sharing a meal with a person with HIV and 77 percent reported that mosquitoes were not a risk (13 percent thought mosquitoes were a risk and 10 percent did not know).

The study shows that HIV-risk behaviour of drivers was primarily through unsafe sexual intercourse, including sex with sex workers, casual partners and multiple sex partners. There was no reported risk behaviour related to drug use and syringe sharing. Almost 30 percent of drivers had reported sex with casual partners and 40 percent reported sex with sex workers. Drivers discussed their visiting sex workers and regionally differences occurred when northern drivers reported drinking together but going to sex workers on their own, whereas southern drivers often went together as friends to visit sex workers. Southern and central drivers highlighted the social element of drinking and going to meet sex workers and the male bonding involved. Drivers reported meeting sex workers in cheap, average accommodations where prices were cheaper. Drivers stated in discussions that when you have alcohol you need to have women. The quantitative research showed that there was the association between alcohol drinking behaviour and sex behaviour of the drivers. The risk of having sex with female sex workers and casual partners among the drivers drinking frequently was 4 times higher than that of the drivers who did not drink wine/beer frequently (p value <0.001; OR=4.) These results occurred despite the possible over-reporting of condom use by northern driver. The results of in-depth interviews indicate that having sex with sex workers often happened after the drivers had been drinking and were invited by their friends. This suggests that alcohol may play an important role with social networks and group behaviour related to visiting sex workers. Drivers discussing crossing into Lao PDR stated that it is easy to find sex
workers in Lao and that laws are less strict than in Viet Nam, so they are more likely to visit sex workers in Lao. These sex workers tend to be Vietnamese.

Condom use varied by region, but sexual risk behaviour was reported. Drivers reported using condoms with casual partners and sex workers 30 percent of the time, and only 15 percent of the time with their wife. From discussions in qualitative research, free condom distribution does not seem to increase condom use as drivers prefer to buy them in pharmacies. Previous projects providing free condoms to drivers, however, showed that while drivers were initially reluctant to take free condoms, later requested them. It is possible that social norms prevent some drivers from admitting to accept free condoms and that previous HIV prevention projects with drivers ended in the early 2000’s and the acceptance of condom distribution has been reduced. One sex worker reported that drivers had unusual shaped condoms further highlighting the information needs of drivers. Many shaped or decorative condoms are dangerous, especially to the woman, and are less effective in preventing HIV. Northern drivers reported far more consistent condom use than central and southern drivers.

The study was not able to determine if this was due to a reporting bias where the drivers knew the ‘correct’ answer and provided it, or that risk behaviour is much less in the north. According to UNAIDS and other organisations working largely with HIV, there is often under reporting risky sexual behaviour and over reporting condom use in Viet Nam. While according to the General Statistics Office five percent of Vietnamese have had an HIV test, almost 30 percent of drivers had. Half of these tests were voluntary, indicating that some drivers recognise their own self-risk to HIV. Other drivers have mandatory tests required by their company; a common practice amongst Vietnamese companies related to labour, such as construction workers and drivers. The very low reporting of pre-test and post-test counselling indicates that testing centres still lack experience and knowledge on the mental health impact of HIV testing and on basic counselling skills.

Health-seeking behaviour

Almost 30 percent of drivers reported that in the past 12 months they been to a government hospital, four percent reported going to private hospitals, and 66 percent reported not going to a hospital or doctor at all. In focus-group discussions, many drivers were not able to name health centres or hospitals they had used or knew, indicating that branding and publicity of health services has not adequately reached mobile populations.

Private hospitals are better if you do not have much free time. You can go to them anytime you have a health problem. State hospitals require a lot of time as you always have to wait for long time. (Driver)

Fifty-four percent of truck drivers had bought medicines at pharmacies to treat illnesses such as headache, backache, flu, cough and stomach ache. Medicines commonly purchased when self-medicating included antibiotics, analgesics, and antipyretics, which were bought based on advice from pharmacists or based on the
last prescription. Half of the drivers reported self-medicating when sick. Some drivers said it was too difficult to find a health centre along trucking routes. Even when they were so seriously ill, only 60 percent of them went to government hospitals. Many bought medicines at pharmacies and self-medicated. They explained that the government hospitals were far and treatment would affect their travelling and income.

Drivers stated feeling excluded from health-care services, with descriptions of working in areas with little health care, paying more for services when not a resident, and not feeling they could access care where they worked.

*It is a long distance from here to Hanoi. If unfortunately you have accidents or get sick on the way, you have to go in to a resident’s house, as there were not any health services on the way.* (Driver)

*I have been working for many years, but there have been no organizations take care of drivers’ health.* (Driver)

*In order to take good care of long distance drivers, we must have health care branches situated in districts on their routes.* (Driver)

*Truck drivers sometimes come here just to check some common illnesses. They do not like being in hospital for a long treatment. They may fear that it will affect their driving.* (Health staff)

*When I am outside the city, I am stranger there. I had better buy medicines and treat myself at home. If only there were health care centres at stopping places on the way.* (Driver)

**Health insurance**

Fifty percent of the drivers reported having no health insurance. Thirty percent reported having insurance through their company, and 20 percent reported obtaining insurance on their own. In the northern region, 51 percent had insurance and 49 percent did not. In the central region, 53 percent were enrolled in insurance (and 47 percent were not) and in the south 45 percent had insurance and 55 percent did not. Drivers belonging to state-owned companies were ten times more likely to have health insurance than drivers who owned or rented a truck. (p <0.01; OR=9.5)

Among drivers who had health insurance, 63 percent of them had used the insurance for medical treatment. Of these, 55 percent felt satisfied with the insurance.
coverage and 35 percent felt it was an average or unsatisfactory service. Difficulties using the insurance programme included residency or geographic location when using insurance. For example, drivers mentioned the following:

*Hospital staff told me that since I was from Quang Tri and not from Saigon or Hanoi, I needed to go back to Quang Tri to be able to use my health insurance. It is clear that health insurance should be more flexible.* (Driver)

*We are often mobile around the country and not just only in one district. Our company has enrolled us, however, in health insurance in some hospital or district. We need to have some sort of mobile health insurance so we can find a hospital when we need it.* (Driver)

In focus-group discussions, drivers felt that the health care with insurance was inadequate and only provided periodic medical exams measuring weight and height. Driver felt that when they used their insurance card they received less quality services and were treated poorly. Focus-group discussion indicated that drivers treat themselves through pharmacies rather than use their insurance at hospitals.

**Conclusions**

Truck drivers’ daily lives are closely associated with the complex and diversified social environment along the roads. The working and social environment of the job has significantly affected their health and health-related behaviours, and driver-oriented health-care services are important. A comprehensive safe driving (behaviour change) communications programme should be initiated with drivers to prevent drug use and risk behaviour and better protect themselves against drunk driving, unprotected sex, and speeding. Mobility-related health information and services should be geographically appropriate and mobile-friendly to reach drivers.