



Health and Wellness of Southern Ontario Truck Drivers

Development of a Health and Wellness Survey and Knowledge Transfer Actions

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Objectives

- To describe a collaborative partnership with community champions in the transport sector to develop a health and wellness survey for truck drivers
- To identify the health needs of a high risk marginalized population of male truck drivers
- To discuss innovative collaborative knowledge transfer action strategies

Why Truck Drivers?

Most prevalent occupations for men in Canada , 2006 Sources: Statistics Canada, censuses of population, 2001 and 2006.

Men	2006 Employment	2001 to 2006 Employment Change
Retail salespersons and sales clerks	285,800	63,600
Truck drivers	276,200	40,900
Retail trade managers	192,200	-8,100
Janitors, caretakers and building superintendents	154,100	18,800
Farmers and farm managers	147,800	-21,200
Material handlers	147,000	13,900
Automotive service technicians, truck and bus mechanics and mechanical repairers	143,000	20,400
Carpenters	142,400	32,900
Construction trades helpers and labourers	133,600	47,500
Sales, marketing and advertising managers	102,600	10,200

Why Truckers?

- Trucking industry plays a major role in the Canadian economy
- Occupation with highest lost time injury in Ontario (WSIB 2006)
- Truck drivers have higher than average health risks and poorer than average lifestyle behaviours, in large part due to the working environment
- Trucking Association of America (2007) health screening study
 - 49% were obese, 39 % were overweight and 31% had high blood pressure.
- Some health issues (e.g. BP, Diabetes, sleep apnea, stroke) can limit driver's ability to work
- **No Canadian data on prevalence of risks to inform programs and strategies**

We know workplace conditions affect health..

- Work time lost in Canada has increased from 7.4 days per worker in 1997 to 10.0 days in 2008 (*Statistics Canada,2009*)
- Employees in good health are 20% more productive than those in poor health. (*European Health and Productivity management, 2004*)
- The average direct cost of employee absenteeism in Canada is \$3,550 per employee per year. Combined with indirect costs, employee absenteeism accounts for 17% of payroll (*Watson Wyatt Study,2000*)
- Employees who have three or more risk factors (i.e. are physically inactive, smoke, have higher alcohol consumption and are overweight) are more likely to have 50% more absences from work compared to employees who do not have these risk factors. (Shain, M & Suurvali H. 2001)
- ‘Lone Workers’ unique workplace setting

Objectives of survey

- Design and pilot a survey instrument
- Determine the prevalence of health conditions, risk factors and health behaviors and to characterize contributing working conditions
- Provide basis for a larger national study on the health of truck drivers

Methods

- Relevant published surveys where available
- Focus groups to elicit survey domains and language of industry
- Pre-test survey with drivers
- Administer in companies

Focus group methods

- Elicit range of issues of work, lifestyle, and relation to health
- 2 companies: 1 manager group + 1 driver group in each
- Semi-structured interview guide
- Groups audio-recorded and transcribed
- Conducted by members of research team
- Analysed in pairs then team consensus to determine survey domains

Survey Instrument

- Diet - Behavioural Risk Factor Surveillance System (BRFSS)
- Exercise - International Physical Activity Questionnaire (IPAQ)
- Job Stress- Job Content Questionnaire (Karasek, 1998)
- Stress - Stress Satisfaction Offset Score (Health Canada)
- General health, sleep, tobacco use, demographics- Canadian Community Health Survey (2008)
- Health care utilization - Canadian Experiences with Primary Health Care Survey (2008)
- Work factors – made up or other single published studies

Survey Methods

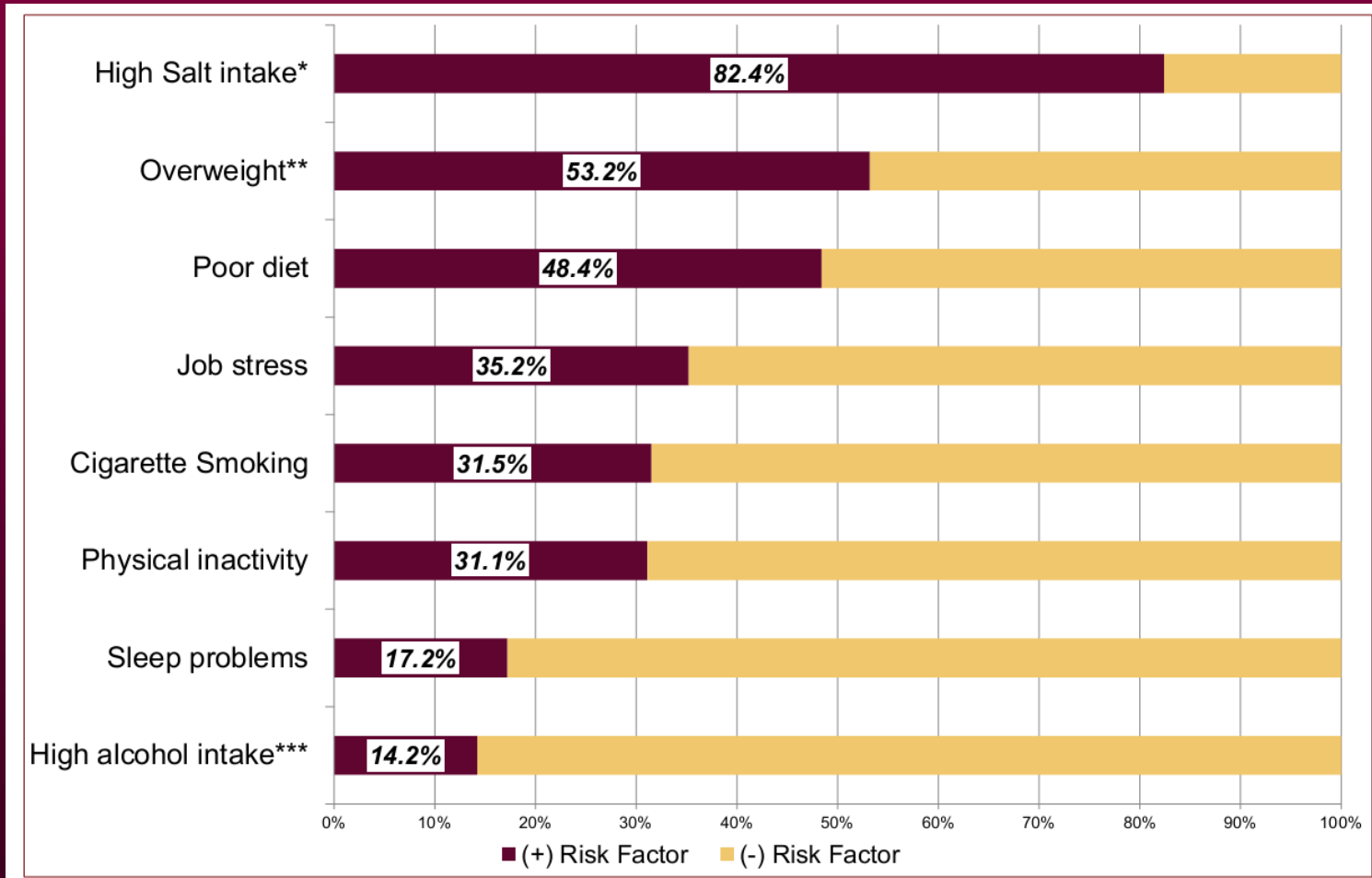
- **Participants:** 13 carrier companies
- **Distribution** of survey packages to 13 companies: \$5.00 incentive Tim Horton's card, fact sheet, locked box onsite for returns, posters and dispatch support
- **Analysis:** descriptive analyses using SPSS using standard scoring manuals where available
- **Dissemination:** Individual results reports to be distributed to each company tailored to their data, planning meetings for next steps

Results

49% response rate (406/822)

Socio- demographic Variables		Proportion(%) of respondents (N=406)
Age	Less than 30 years old	4.5
	30-49 years old	47.0
	50 years and older	48.5
Male gender		96.0
Education	Elementary	11.1
	High School	58.7
	Community College	23.3
	University degree or Graduate level	6.9
Married/Common-law		79.4
Income (CAD \$)	<40,000	8.2
	40-59,999	29.0
	60-79,999	28.3
	80,000 or higher	34.4
Born in Canada		82.7
Duration of work as a driver	<5 years	7.1
	5-9 years	14.0
	>10 years	78.9
Points of delivery	Within city	32.8
	Within the Province	25.9
	Outside Ontario but within Canada	22.7
	Across -US border	41.7

Prevalence of Risk factors



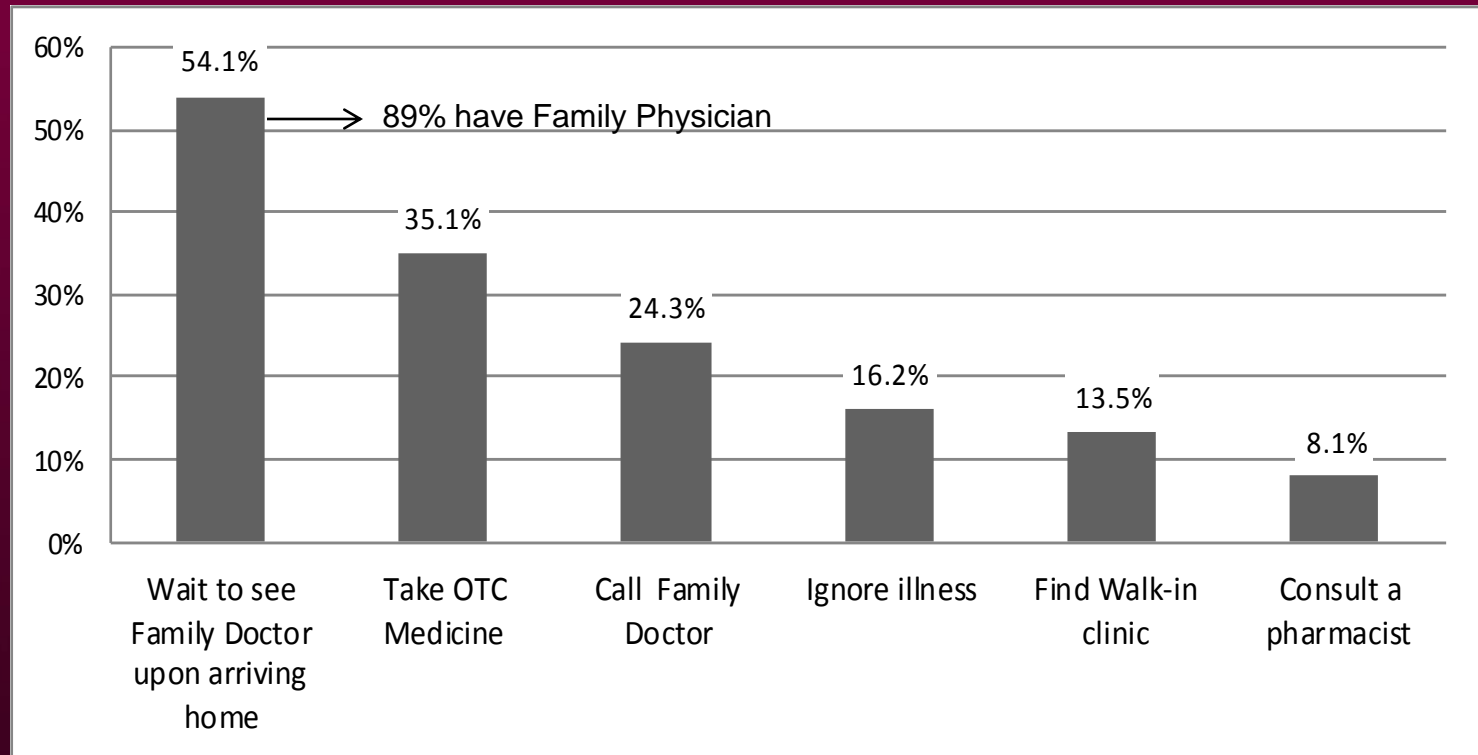
*Salt intake $\geq 2,300$ mg per day computed based on dietary intake survey; **Self-reported;

***Alcohol intake higher than low risk drinking guidelines

Other risks

Issue	%
Diet rating	50% diet needs improvement 48% poor diet
Sleep	35.7% get <6 hours of sleep a night
Sources of stress	66.8% indicate work situation (hours, traffic, weather, lack of respect), 53.4% financial situation and 51% indicate time pressure

Health Seeking behaviour when on the road



Qualitative Focus Group Results

Major Themes

Stress

Workplace and Communication

Lifestyle and Family Dynamic

Fatigue & Sleep

Stress

Traffic and route (loads last minute, other drivers)

Trucker interaction with industry/government/public (respect issue, fines, police, company communication)

Finances (payment, fines, regulations)

“Work is pulled by our customer.” (manager)

So I have a truck, we have a trailer, we want to make sure it makes x amount of dollars in a certain period of time. Well our customer doesn't really care. Our customer says I want this, this, this, this, here, get it done. Which means we basically at some point and time they want us to triple our fleet to help them out in this particular week, no that doesn't make any economical sense. So they also need to understand the rules and regulations with regards to bunk time and everything else. And quite frankly they don't care because they'll go to somebody else.”
(manager)

“if they’re allowed in the building they have to stay in a caged area. They’re allowed on the dock they have to stay in a confined space for safety reasons. Are they allowed to walk around the yard? Probably not.. they are confined.” (manager)

“... the regulations change over night in terms of the length of the flaps but they’re never notified but they get fined when they pull in.” (manager)

“And with tires you can’t fight them. It’s like -no it was down to the wear bar.- No it’s still safe there’s nothing wrong with it.- No it’s down to the wear bar,- can’t find anything so this is what I’m going to nail you with.” (manager)

Workplace and Communication

Training and regulations

Relationship with Customer

Relationship with Employer

Infrastructure and Environment

“I used to go up there 7 o’clock Saturday morning now this guy he’s frying eggs, he’s frying bacon and everything in there. He’s not thinking about going out to the crane the crane is parked. So what do I do? I go and sit in my truck for 3 hours till somebody has their breakfast then has their coffee, has a little nap now they go out and unload it.” (driver)

Lifestyle and Family Dynamic

Nutrition (accessibility, availability, costly, time)

Physical activity (no time, too tired)

Culture among drivers (independence, pride, like family)

Family Commitment (late for family events)

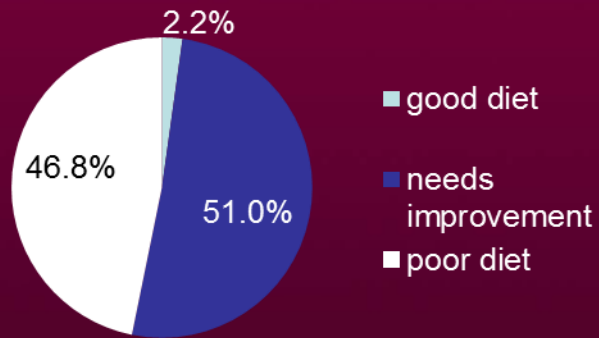
Primary health Care conditions (smoking, overweight, alcohol, diabetes, blood pressure)

“Parking is an issue so you can’t get proper food. You go to a truck stop you know,...and look at the menu. Everything is like ‘drips with grease’. (driver)

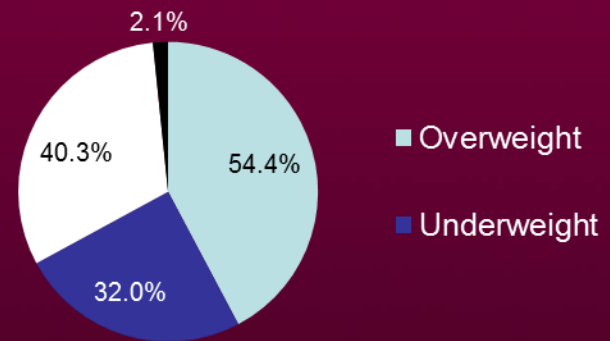
And if they do offer fresh fruit... it’s way over priced” (driver)

“its just..it’s part of a lifestyle, old school lifestyle you know. Like you know, coffee, 10 cups of coffee, 2 packs of cigarettes, there OK I’m good for 500 miles”. (driver)

Diet quality

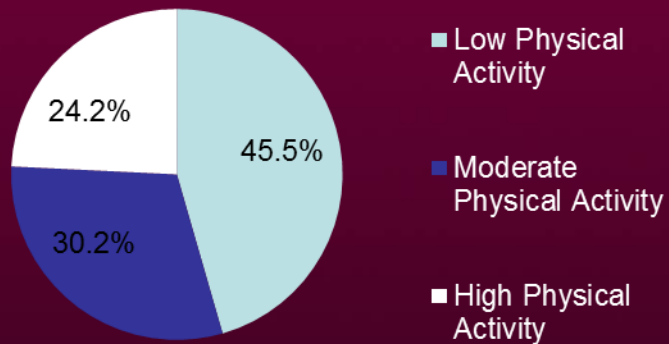


Perception of Weight

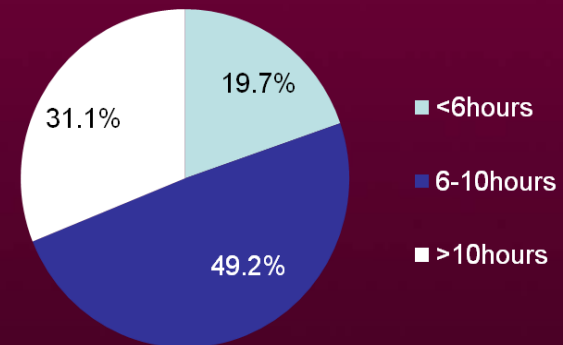


“after putting in a 10 hour day you don’t want to be putting in another 2 hours you know at the gym or actually when you put in a 14 hour day. You know you’re tired. Mind you my wife tries to get me to go to the gym all the time and I just well if I go to the gym it just takes an extra 3 hours of my day, I’m only getting 7 hours sleep not even because I’ve got to shower. So I lose sleep and it’s not worth it out there on the road. If I kill somebody it’s not.” (driver)

Physical activity



Hours per day sitting



“it’s also hard choosing with your family life you know. My wife warned me years ago, not to say when I’m going to be home. Don’t write that ink. You know Friday afternoon, 5 o’clock we’ve got to be somewhere, I call her at a quarter to 3, well where are you? I’m in Buffalo you know and I ain’t going to make it. Like I missed so much of my kids growing up like pageants and all that stuff, I never got to see any of that because I was always driving right. But somebody’s got to feed them right?” (driver)

Fatigue and Sleep

Work hours and scheduling

Sleep policy/regulations

Alertness, boredom

“Myself personally I see myself you know you start nodding off. I’ll pull over walk around the truck even take a 10 minute nap. Set your phone. You’re better off having a 10 minute nap than having a 2 hour accident right.” (driver)

“17 hours is normal for myself. I’ll be here Sunday, I’ll leave here at noon, I’m at the customer at 8 o’clock. They come in at midnight and they say OK we can unload you now. So you lay down for 4 hours, they unload you. Takes an hour to unload” (driver)

Knowledge to Action

- **Two report back sessions to the sector**
 - June, 2011- sharing results, linking with local and international collaborators
 - October, 2011 – action planning with companies, customers, drivers, workplace wellness partners and research team
- **Design team established**
 - Website developed – TRIHPP
 - Tailored targeted health literacy
 - Customer survey development
 - Knowledge Transfer sessions with collaborators- IWH, WSIB
 - Collaborative integrated workplace wellness research projects explored

Potential Action Directions

- Individual health literacy approaches
- Company/corporate workplace wellness approaches
- Customer approaches
- Policy/government regulatory approaches
- Develop a coordinating collaborative

Conclusions

- Results showed chronic disease risks and modifiable lifestyle risk factors related to working conditions.
- Collaboration with stakeholders from the sector will help to inform work site policy interventions and offer an evidence base for programs and policies to improve health and safety among these high risk professional drivers.
- Engaging with community members and community organizations will help to assess and enhance the system's capacity to deliver equitable health services and programs.