What if transport was an urgent public health matter?

Transport Knowledge Hub August 2019

Alistair Woodward, University of Auckland
Michael Hale, Auckland Regional Public Health Service
“The increasing weight of people worldwide is the result of a normal response, by normal people, to an abnormal environment”

Lancet 2011;378:741
Land use and activities influence public health

- Whether *intentional or unintentional*, environmental decision making influences health outcomes.
  - Communicable diseases (e.g. waterborne diseases – sewage systems)
  - Non communicable diseases (e.g. obesity – urban design)
The environment as cause

- Half of Aucklanders are not active enough
- Half of short trips made by car could be walked in 20 minutes
- Poor neighbourhoods are twice as likely to have more fast food outlets than fruit and vegie shops nearby
- Junk food dominates what’s available at sports games
- Fast food outlets are clustered within walking distance of schools
- 55% of Auckland kids get driven to school
- 6 hours a day spent sitting at work
Environment trumps health advice
The environment as solution

Better urban environments can increase activity by one-third
Walking, cycling or using public transport keeps you a healthy weight
Kids free from junk food marketing
Neighbourhoods have access to good affordable food
Kitchens and tuckshops have good food
Safe routes to walk or cycle to school
Employers invest in a healthy workforce
The benefits of improving the environment

- People are nudged towards more physical activity rather than having to rely on willpower
- Moving more as part of normal daily life
- Changing the default environment from health preventing to health promoting

66% more stair use

<http://www.thefuntheory.com/piano-staircase>
Environmental focus for the win: Tobacco Control in NZ

- Health Dept posters 1948
- TV & radio ads banned 1963
- Pack warnings 1974
- First tax increase 1985
- SE Act 1990 & sponsorship bans
- SEAA 2005 bars smokefree

Environmental change for road safety

FEWER, AND LESS SEVERE CASUALTIES

Pre-treatment

Post-treatment

40% reduction in crashes

50% reduction in crash costs
Environmental Change: Fort Street Auckland 2009-2013

User perceptions
Foot traffic
Vehicle traffic
Vehicle speed
Safety
Retail spend

24 July 2009

Fort Street Before and After - eyeonauckland.com

15 November 2013
Is transport a public health matter?
Transport and trauma

• Road injuries are the 9th leading cause of premature death in NZ

Source: Ministry of Transport • Get the data • Created with Datawrapper
Air and Noise Pollution

- Vehicle emissions include particulate matter (PM$_{10}$ and PM$_{2.5}$), and NO$_2$, CO and other gases.
- 22% of health impacts from PM$_{10}$ in NZ 2006 from vehicles (HAPINZ 2012)
Estimated health burden of transport

- 650 deaths from transport per year.

**NZ Deaths from Transport, 2012**

- Road traffic crashes: 300 deaths
- Air pollution: 250 deaths
- Noise from road vehicles: 50 deaths

**NZ Years of Life Lost from Transport, 2012**

- Road traffic crashes: 15,000 YLL
- Air pollution: 10,000 YLL
- Noise from road vehicles: 5,000 YLL

Climate Change and Transport

- Transport = 20% of NZ’s GHG emissions
- Have risen 82% since 1990
Physical Inactivity

<table>
<thead>
<tr>
<th></th>
<th>All Cause Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR (adjusted)</td>
<td>1.28 (1.21-13.6)</td>
</tr>
<tr>
<td>PAF (NZ)</td>
<td>12.7% (10.2-15.4)</td>
</tr>
</tbody>
</table>


- 50% of NZ adults meet guidelines for physical activity
- We spend 6 weeks per year in private vehicles (5.3-6.7)
- Moving 5% of short urban car trips to cycling would save 117 deaths / year:
  - 116 fewer deaths through increased physical activity,
  - six fewer deaths due to local air pollution from vehicles,
  - and an additional five cyclist deaths from road crashes

http://www.planetizen.com/node/53728
People should not be killed or seriously injured while using the transport network for everyday activities

Reversing New Zealand’s current trauma trends requires a transport system that is designed for people, and one that considers their safety as the top priority.

We aim to put people and place, rather than vehicles and networks, at the centre of our decision-making.

Our position is that it is unacceptable for anyone to be killed or seriously injured while travelling or working on the land transport system.

We will embed the Safe System approach in our decision-making and in our standards.
People should not be killed or seriously injured while using the transport network for everyday activities.

Reversing New Zealand’s current trauma trends requires a transport system that is designed for people, and one that considers their safety as the top priority.

GPS 2018-2022

We aim to put people and place, rather than vehicles and networks, at the centre of our decision-making.

Our position is that it is unacceptable for anyone to be killed or seriously injured while travelling or working on the land transport system.

We will embed the Safe System approach in our decision-making and in our standards.

NZTA Statement of Intent
But is transport treated as an urgent public health matter?

Auckland Transport pulls out of St Heliers meeting amid safety fears from over 60s crowd

Laine Moger • 19:56, Apr 16 2019

A "hostile" crowd of over 60s caused Auckland Transport to pull out of an Auckland community meeting due to safety concerns.

Nearly 600 members of the St Heliers community were expecting to address, with an Auckland Transport employee, concerns they had around a controversial proposals for road safety changes in the area, at a meeting on Monday.

But Auckland Transport’s chief executive declined the invite to speak, citing a "hostile" group and saying he had "a duty of care to the wellbeing" to his employees.

Auckland Transport wants to make the changes – which include reducing the speed limit from 50 kph to 30kph and adding 13 new crossings, which will take away 40 car parks – in St Heliers and Mission Bay as part of a city-wide road safety initiative.
The Smoke-Free Environments Act was not poll-driven
Health and safety in the workplace

• Pre-history
• The inspector age
• Pike River and after
Health and safety in the workplace

- Shared goal – zero injury and illness
- Identified duty of care
- Responsible officers
- Standards
- Monitoring and reporting on risks
- Tripartite decision-making
- Upstream risk reduction (design, production)
- Worker engagement, participation
Workplace deaths
About 60 per year from injuries
600-900 from work-related illness
Workplace deaths
About 60 per year from injuries
600-900 from work-related illness

Road transport deaths
About 350 per year from injuries
? from road-related illness
Where does consultation occur?

Shared goal – zero injury and illness
Identified duty of care
Responsible officers
Standards
Monitoring and reporting on risks
Tripartite decision-making
Upstream risk reduction (design, production)
Public engagement, participation

Consultation

Health and Safety in the Workplace Act

Implementation
Where does consultation occur?

- Shared goal – zero injury and illness
- Identified duty of care
- Responsible officers
- Standards
- Monitoring and reporting on risks
- Tripartite decision-making
- Upstream risk reduction (design, production)
- Public engagement, participation

Consultation

Health and Safety on the Road Act

Implementation
When we board an aeroplane, we expect that those responsible, the airline and the aviation authorities, have taken responsibility for our journeys, and that the system is safe and works for everyone. When we go to work, our health and safety laws places clear expectations and responsibilities on our employers to ensure that everyone who goes to work comes home healthy and safe. In the same way, we should expect our road system to be designed for people, travelling in different ways, instead of blaming people for failing to survive in the system we have designed.
But is transport treated as an urgent public health matter?

Auckland Transport pulls out of St Heliers meeting amid safety fears from over 60s crowd

Laine Moger • 19:56, Apr 16 2019

A "hostile" crowd of over 60s caused Auckland Transport to pull out of an Auckland community meeting due to safety concerns.

Nearly 600 members of the St Heliers community were expecting to address, with an Auckland Transport employee, concerns they had around a controversial proposals for road safety changes in the area, at a meeting on Monday.

But Auckland Transport’s chief executive declined the invite to speak, citing a "hostile" group and saying he had "a duty of care to the wellbeing" to his employees.

Auckland Transport wants to make the changes – which include reducing the speed limit from 50 kph to 30kph and adding 13 new crossings, which will take away 40 car parks – in St Heliers and Mission Bay as part of a city–wide road safety initiative.
Cambridge’s New Bike Lane Law is ‘Bikelash’-Proof

LAURA BLISS  APR 11, 2019

The Boston suburb now mandates the addition of protected bike lanes on all streets due for planned upgrades. It’s a strategy other cities should follow.

There’s been a strategic breakthrough on the front lines of the American bike wars: This week, the Boston suburb of Cambridge mandated that protected cycling lanes be installed on all streets that are slated for reconstruction under existing city plans.
