

Traumatic Brain Injury affects many people in the criminal justice system

Traumatic brain injury (TBI) is a change in brain function caused by an external force

Concussion is a mild form of Traumatic Brain Injury. Even mild injuries can lead to lasting health issues and cognitive defects.

We used linked Ministry of Health, ACC, and Justice data to examine the rate of prior recorded TBI for people at different stages of the justice system.

The rate of TBI in the justice sector is

2.5x to 3.5x higher

than for the public



We examined TBI before Justice Sector interaction

These results measure TBI that occurred before justice system interaction in 2015, that was recorded because of:

- a hospitalisation, and/or
- an ACC claim

This analysis will under-estimate the rate of TBI, because some people will have a TBI without being hospitalised or making an ACC claim.

Causes of TBI could only be estimated for ACC data. It was not possible to categorise severity TBI (e.g. mild/moderate/severe) with the current IDI data.

TBI affects...



34% of people proceeded against by police



36% of people charged in court



40% of people community sentenced



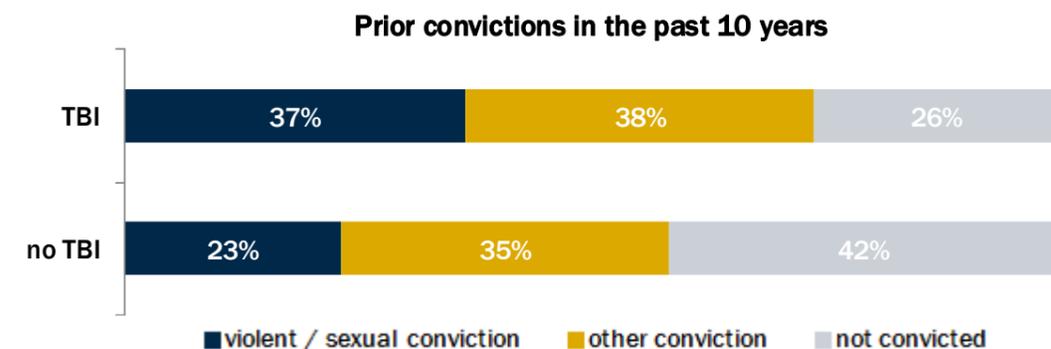
47% of people remanded
46% of people imprisoned



compared with **13%** of the public

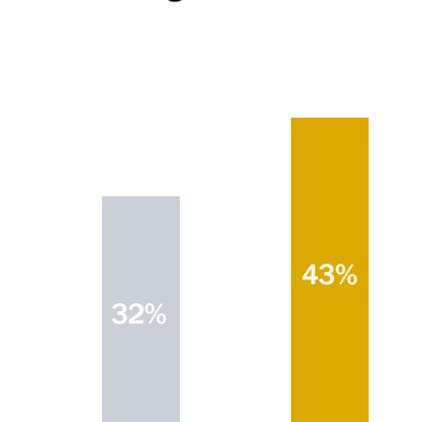
People with a TBI who have offended are more likely to have a conviction for a violent or sexual offence

People charged in court who had a TBI were on average **3 years younger** at first charge



People with a TBI who have offended are more likely to offend again within 2 years

Re-offending rate



Even when we take other factors into account, having a prior TBI was strongly associated with re-offending, more strongly associated with reoffending than being male.

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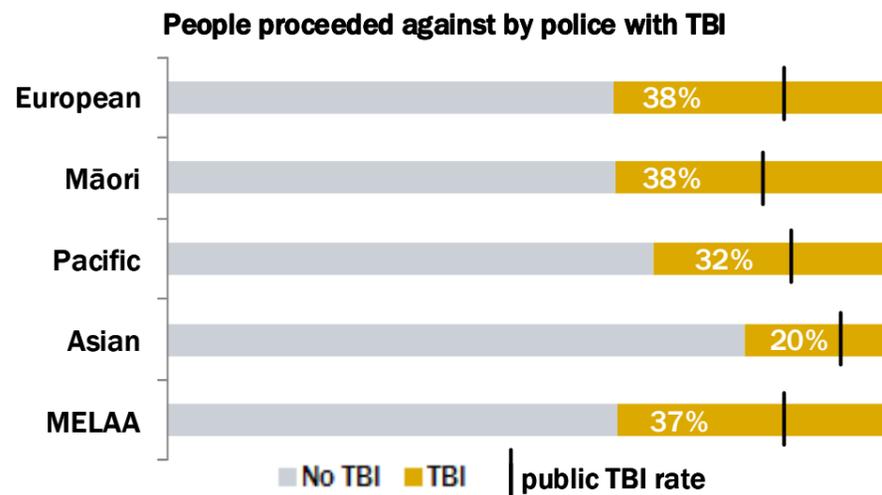
The rate of TBI is different for people of different sex & ethnicity

For people in every part of the justice system, as well as for the public:

- males are more likely to have a TBI than females
- European, Māori, and Middle Eastern, Latin American, or African ethnicities are more likely to have a TBI
- people of Asian ethnicity are less likely to have a TBI

of people proceeded against by police had a TBI, compared with 26% of females

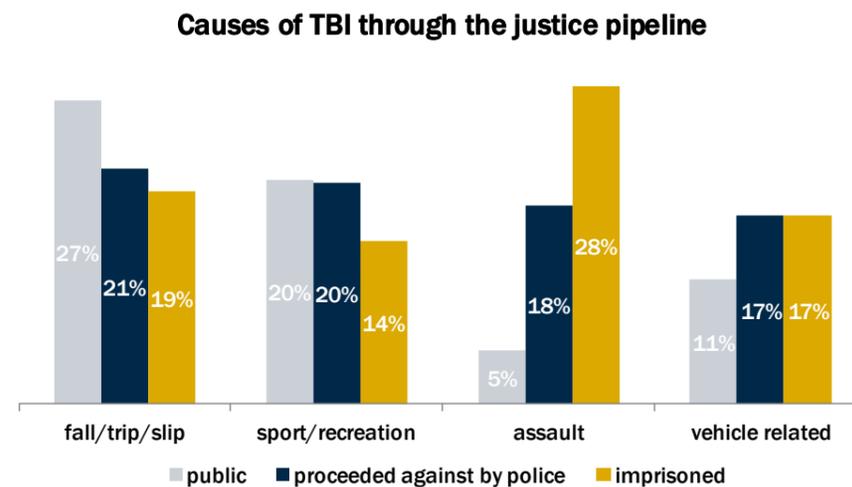
37% of males



the most common cause of TBI for the public is falls/trips/slips (27%)

the most common cause of TBI for people in prison is assault (28%)

Causes of TBI are different for people in the justice system than for the public



This analysis filled a gap in knowledge about TBI in the justice system

TBI is a major cause of injury and death in New Zealand

- a 2015 study showed that in 2010 13% of New Zealanders had experienced at least one TBI
- of all health conditions, TBI has the second greatest impact on employment and income after stroke
- over half of serious claims to ACC are about a TBI

We knew that rates of TBI are higher for prisoners

- in a 2005 survey 64% of people in prison reported having a head injury
- in a 2017 study 95% of females in prison had a history of TBI

There is some evidence that TBI is related to criminal behaviour, although more research is required to understand this association.

TBI at different stages of the justice system had not been investigated in the IDI until now

What next?

Using this information about TBI, we can work towards a more trauma responsive Justice System.

This analysis will help underpin policy advice provided as part of the Humane and Effective Justice programme.

The findings will provide the basis for further investigation into how the Justice System can be more responsive to and support the wellbeing of those who have experienced a TBI.