

Targeted Fitness Reconditioning Program, NSW Police Force

Predicting and remediating police officers at risk of injury with a targeted fitness reconditioning program.

NSW Police Force are piloting an injury screening and reconditioning program targeted at Police Officers who present with high injury risk profiles. The dual aims of the program are (1) to identify the areas of physical weakness and implement a remediation and reconditioning program for Officers before injury occurs; and (2) assist with remediation activities for Officers already on return to work programs.

The greatest predictor of injury is a previous injury

Mick Stierli, Health & Fitness Unit, NSW Police

Overview

The NSW Police Force is the oldest and largest Police Force in Australia with over 19,000 serving Officers.

It is critical that these Police Officers have the physical capabilities to match the demands of their tasks.

During the course of their duties, Officers are exposed to scenarios that can result in injury.

The injuries that occur can typically be divided into acute injuries and chronic injuries. Acute injuries being a contact injury, and chronic injuries being non-contact injuries from a series of minor stresses to the body resulting in limited area tissue damage or tears, each of which alone does not cause discernible damage, however, their accumulation over time can lead to a significant injury.

The ability to predict contact injuries is limited, however non-contact injuries are developed over a period of time so there is opportunity to control and prevent the chance of injury occurring.

Evidence has shown that, even when a Police Officer recovers from an injury, their body will quickly learn to associate pain with particular movements. Their body unconsciously compensates by using other, less painful movements instead. In an occupation in which physical ability is paramount, this is problematic.

During their shift, Officers wear load bearing vests and a gun holster, and when undertaking particular duties, they must wear 'riot gear', which can weigh 25 kg.

This equipment adds physical stress to the Officer over the course of their shift. To successfully manage this additional weight, the Officer must have an appropriate quality of movement.



In addition, Officers recovering and awaiting return to work were taking prolonged periods to recover. This was removing officers from their duties.

There was further concern that it was typically taking an injured Officer two months to be assessed.

In 2012, NSW Police, identified that better, more targeted rehabilitation and injury prevention initiatives were required.

The journey to change

To address these issues, NSW Police have piloted a Functional Movement Screen (FMS) for recruits and Police Officers.



The FMS is a standardised screening tool that rates the quality of an individual's movement pattern in a systematic, repeatable way.

Poor FMS scores have been a predictor of injury in both current research and NSW Police Force research, and these predictions can be used to prevent injury. The FMS assesses the following seven steps that involve simple movements: squatting, stepping, lunging, reaching, leg raising, push-ups, and rotary stability.

The FMS captures data that identifies 'red flags' or compensatory movement patterns that may put the Officer at a greater risk of injury.

Once 'red flags' have been identified in an Officers movement patterns, they can be efficiently corrected, effectively individualising the Officer's training program. These exercises focus on the fundamental building blocks of movement patterns.

The program was trialled on a cohort of new recruits starting at the NSW Police Academy, and Officers not on active duty or on restricted duties due to a workplace injury. The screening program consisted of conducting an FMS assessment and a tailored personalised remediation program.

The program was created through the customised NSW Police Force Fitness Platform, an online exercise database available to the 250 Physical Training Instructors (PTIs) operating across the organisation.

Predictive

To gain access to the 19,000 Police Officers across the organisation, a PTI Fitness Qualified Police Officer is at every station to control initiatives that are rolled out.

The FMS was initially tested on 1,000 Police Officers and identified the back, knees and shoulders to be the areas of greatest risk for injury.

The data from the FMS is entered into the exercise database, and the Officer is sent an automated email

listing exercises that are focused on their predictive problem areas.

Each Police Station has an Injury Prevention Toolkit. They are inexpensive and easy to use, and provide the Officers with tools to assist in their exercises.

Return to work programs

The return to work program entails the injured Police Officer working with a NSW Police Force selected sports physiotherapist onsite who provides acute pain relief. After the physio session, the injured Police Officer heads straight into the Health and Fitness Unit gym to work with a reconditioning coach to ensure compliance with exercises.

The return to work program, which includes the FMS, allows the Officer's progress to be tracked closely, allowing faster rehabilitation.

Results

Police Officers who participated in a return to work program achieved remarkably better return to work outcomes than Officers who underwent traditional WorkCover rehabilitation programs.

The results of the program extended beyond the physical well-being of Police Officers to psychosocial factors. Supervisors have reported better work ethics amongst staff since the start of the return to work program, as well as from implementation of FMS testing. The involvement of the Police Force in their health provides evidence to staff that their employer is concerned for their well-being, and ultimately improves work ethics.

Challenges

Resistance was experienced with some units hesitant to provide test subjects for the program, expressing concern that Police Officers could get injured.

Further, compliance with prescribed exercise programs is an ongoing issue.

Snapshot



Future strategies

Future strategies for the program involve providing further access to the program for Police Officers throughout NSW. Currently there is only one specialised gym for the return to work program, further facilities and rehabilitation coaches will have to be established to cover a larger geographical area.

Further, the Unit is aiming to get Police Officers to habitually perform their exercises prior to each shift alongside their usual equipment checks.

This brief was prepared by Big Picture Communications based on presented material from Mick Stierli (NSW Police Force, Health and Fitness Unit) at the NSW Treasury Managed Fund (TMF) Sharing Day 2015. For more information, please contact Mick via stie1mic@police.nsw.gov.au.