



COVID-19: PUBLIC HEALTH LAID BARE

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A legacy of underinvestment in public health has left the virtual fence at the top of the cliff in desperate need of repair. Will the lessons of Covid-19 turn things around? And what do ASMS members at the centre of the pandemic response have to say?

"Health care is vital to all of us some of the time, but public health is vital to all of us all of the time." So said American paediatrician and health administrator Charles Everett at the turn of last century.

It's no secret that the Covid-19 pandemic has exposed a lack of capacity and investment in New Zealand's public health service.

Our lack of pandemic preparedness showed up as recently as last October when the Global Health Security Index gave New Zealand a score of just 54 out of 100 points and ranked us 30th among the 60 high-income countries reviewed. New Zealand scored poorly in early detection and reporting of epidemics, along with the availability of doctors and hospital beds.

The New Zealand College of Public Health Medicine has repeatedly sounded warnings, most recently in a hard-hitting editorial in the *New Zealand Medical Journal* last month:

"The Covid-19 response has exposed an extremely concerning reality – that there is a massive and hugely problematic shortfall in New Zealand's public health investment.

"It is also evident in the number of public health events over the past few years, including the Havelock North campylobacter outbreak and the 2019 measles epidemic – both of which were preventable had the health system had capacity to manage upstream risks."

Government figures show that \$517 million was budgeted in 2010/11 directly for

public health services. Ten years later the budget is \$469 million.

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Looking it at another way – public health services had a budget of about \$140 per capita in 2010/11 compared with \$94 per capita in 2020/21 – a 33% drop in real per capita funding.

In terms of overall Vote Health, public health funding in the 2010/11 Budget represented 3.8% of the vote, compared to 2.3% in the Budget for the coming year.

CAPACITY HOLES

Currently, several public health units and DHBs do not provide guaranteed training posts for public health registrars, despite lobbying by the College for more positions.

It is a situation which College President, Waikato DHB Medical Officer of Health, and ASMS member Dr Felicity Dumble finds deeply frustrating.

"We have an excellent, highly skilled workforce which has done an amazing job, but there just isn't enough.

"We've actually had to turn highly competent applicants away just on the basis that we weren't getting sufficient funding to be able to train them," she says.

That lack of capacity was highlighted in a rapid audit of contact tracing carried out by infectious diseases specialist and ASMS member Dr Ayesha Verrall in April. It stated:

"The capacity of the 12 public health units in New Zealand is the primary factor limiting New Zealand's ability to scale up its case management and contact tracing response to Covid-19."

It also described expansion of the workforce as an 'urgent need' and warned DHBs could not keep plugging the holes by seconding staff from other areas once alert level 4 was lifted.

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Dr Verrall, who has become a household name during the Covid crisis, says, "I knew the people whose work I was reviewing were working extremely hard, that they



Dr Felicity Dumble



Dr Ayesha Verrall



Dr Caroline McElnay

were already exhausted and that what I recommended went against established consensus around how the Ministry and public health units interact with each other."

The legacy of underinvestment stretches to IT systems and contact tracing tools, which were shown to be unfit for purpose.

Dr Felicity Dumble points to the need for information systems that can capture all data needs, from clinical and laboratory notification through to case and contact management, as well as real-time monitoring and centralised reporting.

According to Dr Verrall, there are also major gaps in our technical capacity to analyse data.

"Public health is also about policy and evidence and influencing"

"We do have excellent people in New Zealand, but mostly we sit in the wrong place. A lot of the analytic expertise in infectious diseases sits in universities. I am working now for the first time with modellers.

"I'm more of a clinical epidemiologist, but clearly mathematicians like Sean Hendy are making a big contribution to the modelling space. Why are we only meeting now?" she asks.

Dr Verrall also believes having technical expertise sitting outside New Zealand's policy-focused Health Ministry is 'catastrophic', particularly in a pandemic.

FENCEPOSTS FOR THE FUTURE

There's clear consensus that New Zealand cannot afford to return to a system that was unable to prepare not only for a global pandemic, but the recent measles epidemic, rheumatic fever, TB, and even syphilis.

While national public health services overall did receive a relatively modest 6.6% increase in this year's Budget, there has been no increase to baseline funding for the country's 12 public health units. They have received an extra \$30 million as part of the Covid-19 response, which will focus

primarily on contact tracing and paying the hundreds of people temporarily brought in to help boost the workforce.

Dr Dumble warns while the extra money is welcome, it cannot make up for more than a decade of underinvestment.

"It's really important that this investment is ongoing and sustainable, so that it's not just a kneejerk response. We need to see better resourcing going forward. It's not just how we respond to communicable disease but about preventing disease and prolonging life, with a firm focus on improving Māori health, achieving health equity, reducing child poverty, and mitigating climate change."

There are currently about 171 public health specialists in New Zealand. According to the Ministry of Health, the growth in the number of public health medical specialists holding a practising certificate between 2010 and 2019 was 9.6%, compared to 38% across all medical specialities over the same period. The incremental increase is outstripped by population growth.

The Ministry says it is considering options to increase the funding available for new public health medicine registrars in 2021.

Meanwhile, another ASMS member who has found herself in the Covid media spotlight is the Director for Public Health, Dr Caroline McElnay. She could often be seen fronting the Ministry's now infamous 1pm briefings. She describes the past few months as a 'rollercoaster'.

She says it is important to point out that the issues in public health are about much more than funding.

"Public health is also about policy and evidence and influencing," she says.

She also points out that public health units are only one piece of the jigsaw and the workforce is broader than just specialists.

"The public health workforce is an interdisciplinary workforce with only a number being medical practitioners, so when we talk about the workforce pipeline we can't just look at the medical workforce".

Dr McElnay agrees that New Zealand has a number of unique and complex public

health challenges which "will require a really good look at how we as a country both fund and deliver services to help address these."

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In Dr Ayesha Verrall's view, data, transparency and measurement drive system improvement. She believes the Covid crisis has given us an opportunity to build our public health units and effect structural change.

"I hope that what we see now is the unique challenge of planning for infectious diseases, and it's not a matter of planning for last year's demand. Infectious diseases can have exponential growth, and what we need to do now is ensure that we build that out to include other aspects of public health practice."

Long before Covid-19 reared its head, several public health experts have argued for a strong national agency to consolidate public health activities and take responsibility for our growing public health challenges.

Some are hoping that this will be a recommendation out of the Simpson Health and Disability System Review.

Whatever lessons are learned from the Covid-19 pandemic, Dr Felicity Dumble says future proofing our public health service will take political commitment and leadership, strong governance, and a whole-of-government approach, not to mention increased and meaningful investment.

She says it also needs to be co-designed with the public health professionals who understand it intimately.

Ultimately, she believes we now have the opportunity to move public health service design in New Zealand into the 21st century which we cannot let slip away.