

---

## Are ‘box tickers’ armed with DNA tests inflating the Indigenous population?

By Carla Jaeger and Jack Latimore  
July 17, 2022

Just before the pandemic hit, Amanda Newton, a sales and marketing manager, decided to pursue the long-unanswered question of her grandfather’s heritage.

Using a DNA testing kit from US commercial genealogy company Ancestry, the largest provider of direct-to-consumer genetic testing, the mother from Werribee in Melbourne’s west was hopeful she might finally be able to unearth a buried piece of her family history.



*Amanda Newton discovered her Aboriginal heritage through an Ancestry DNA test. She does not identify as Indigenous.*

The test showed that, to her surprise, and among other heritage, Newton had a small percentage of Aboriginal and Torres Strait Islander ancestry. She’s not the only one. In the 2021 census, 812,728 people identified as being of Aboriginal or Torres Strait Islander origin, a 25 per cent increase from 2016 results, part of an upwards trend that began in the early 1980s.

Some First Nations community leaders are now expressing concern over the recent trend of people who choose to identify as Indigenous after taking a DNA test. They stress the importance of connecting to cultural heritage and kinship.

Newton herself does not self-identify as Indigenous and did not tick the box in the census that asked if she was Aboriginal or Torres Strait Islander.

“I don’t identify as Aboriginal, in respect for the Indigenous community, as I have never been exposed to many of the challenges Aboriginal people have had to face,” she says.

The test Newton took looks at the 22 chromosome pairs found in DNA, analysing them against its own database as well as public databases to give, as accurately as possible, a picture of its users' ancestry.

Newton was surprised by the result. "I got my results back and fully expected that it would say like, maybe there's some Italian or Greek or something like that," Newton says. Instead the site linked her to a distant relative in regional south-central Queensland. The connection allowed her to trace her grandfather's heritage to the Kooma tribe of the Gungarri people.

Since then, Newton has spent time researching where her grandfather came from and teaching her children about their newly learned ancestry.

Self-identification is only one of the three criteria long used in Australia to determine a person's Indigenous status. The "working definition" deems that in addition to self-identifying, a person must be of Aboriginal or Torres Strait Islander descent and also be recognised as Aboriginal and/or Torres Strait Islander by the community. The third prong usually involves a letter or certificate of recognition issued by a traditional owners' corporation or a land council.

Some community leaders say those who identify as Indigenous without satisfying these criteria can perpetuate the disadvantage of the most at-risk Indigenous communities across the nation. They argue that because government data collections do not accurately flag such cases, resources meant to address Aboriginal and Torres Strait Islander disadvantages could be misdirected.

While some of the growth in those identifying as Indigenous can be attributed to a growing population, along with the general tendency of children from Indigenous and non-Indigenous mixed relationships to identify as Indigenous, some community leaders say two other factors are at work: the increasing acceptance – and celebration – of Indigenous identity; and the thriving ancestry research industry, which offers commercial DNA testing.

LinkUp Victoria, an organisation that connects family members from the Stolen Generations in Victoria and Tasmania, told *The Age* and *The Sydney Morning Herald* it received a swath of applications in 2020-21 from people wanting the organisation to confirm their Aboriginality, even though this is not a "service" the organisation can provide.

"In the south-east, particularly along the coast, an increasing number of middle-class liberal progressives are self-identifying, claiming their Aboriginality through a distant relative," says academic Suzanne Ingram, a Wiradjuri woman.

The distortion of demographic statistics has real-world implications for disadvantaged Indigenous communities, says Denise Bowden, chief executive of the Yothu Yindi Foundation (YYF), which represents Yolngu people in Arnhem Land. Governments at all levels rely on data, such as demography, to determine the

distribution of much-needed funding, and a spike in one location can conceal the urgent need for services in another community.

Five years ago, the YYF made a submission to a Productivity Commission inquiry into the Horizontal Fiscal Equalisation system, which is used to determine the distribution of GST revenue to the states and territories. The system considers “weighting factors” that include geographical and remote locations, levels of disadvantage and the Indigenous population.

In that submission, Bowden noted that the Commonwealth’s methodology didn’t fairly weight the varying circumstances of Indigenous people across the continent, which compromised Indigenous people in the Northern Territory’s access to GST allocations.

The YYF report also referred to “lax census data” as contributing to inaccurate recordings of Indigenous populations.

While the census does not require respondents claiming to be Indigenous to provide evidence, the ABS says it believes the vast majority of people complete the census truthfully.

Playwright Nathan Maynard, a palawa man, grappled with the issue of people who incorrectly identify as Indigenous, known as “box-tickers”, in his play *At What Cost*, which ran at Sydney’s Belvoir Street Theatre earlier this year. Speaking to *The Age* in February, Maynard said that people claiming Indigenous identity without understanding the trauma of Aboriginal people or sharing the connection to country was harmful to the Indigenous community.

Professor Emma Kowal, who has worked extensively within Indigenous communities as both a medical doctor and anthropologist, says this is “an issue that has been there for many decades”.

In a 2019 article she co-authored, “What’s at stake? Determining indigeneity in the era of DIY DNA”, published in the journal *New Genetics and Society*, Kowal noted the potential impact of ancestry testing on the Australian Indigenous community. Kowal estimates that when AncestryDNA updated its service just before the pandemic to provide an ancestry estimate for “Indigenous Australian”, at least 100,000 Australians used the site.

To develop an ethnicity estimate for a customer, Ancestry takes the DNA from a testing kit and compares it against its database of samples collected from people who have strong family histories from specific parts of the world.

Ancestry’s current database, which it calls its “reference panel”, has 56,580 DNA samples that divide the world into 77 overlapping regions and groups. The panel now has 53 samples of people with Aboriginal and Torres Strait Islander heritage.

Before the company had enough samples with Indigenous Australian heritage to compare, a customer who took a test and had Aboriginal or Torres Strait Islander heritage would receive results with a broader ethnicity estimate for the generalised subregion of Melanesia, which the company broadened to encompass Australia.

“If you receive the Aboriginal and Torres Strait Islander region in your DNA results, this tells you that you probably had an ancestor who was an Indigenous Australian,” the company claims on its website.

Kowal agrees that the science behind Ancestry’s update is accurate, but even now, results can vary. Because of how DNA is passed down, two siblings may not even share particular DNA.

For Katherine Marks, a Dja Dja Wurrung and Dhudhuroa woman, the percentage range of Aboriginal and Torres Strait Islander ancestry indicated in her results from a testing kit was a lot lower than expected. She describes basing someone’s Indigenous status on a DNA test alone as “foolish”.

“It reduces a complex social phenomenon to a matter of biological percentages.”