Who’s Your Daddy?

An explosion in the popularity of DNA tests is exposing a litany of secrets and lies, with as many as one in four tests returning an unexpected result. And as Joanna Wane discovers, it’s ripping some families apart.

How many people would have known what the hell a “centimorgan” was? Jenny Rhodes* did. And when she saw the numbers on her computer screen, she also knew they didn’t stack up.

“I was sitting there thinking, ‘This is a bit weird,’” says Rhodes, a genealogy sleuth who’d spat some saliva into a test tube and sent it off for an ancestry DNA test to help flesh out her family tree. The analysis showed solid Anglo-Saxon stock – no surprises there. But when her DNA was matched with other genetic profiles on the company’s database, a woman she’d never heard of popped up as a first cousin or half-niece. Her connection with a few relatives on her father’s side also looked out of whack.

At first, she pushed the mystery aside. Both her parents had recently died and Rhodes was deep in her own

* names changed for privacy reasons
For Rhodes, one of the toughest moments was breaking the news to her adult children, who had a close relationship with their father, brother, who had his DNA tested, too.

For a layperson, the science is quite complex, but essentially centimorgans are units used to measure genetic links; full siblings share around 3500 of them. Rhodes and her brother fell short by half. “It had always been a family joke that one of the boys had been fathered by someone else, because he was a little different to the rest of us,” she says. “No one ever dreamt it was me.”

Rhodes, who’s in her 60s and lives in a small rural town, is still coming to terms with the fact that the “lovely, gentle man” she was raised and nurtured by is not her biological father. What makes her DNA such a tangled mess is that the person who contributed nothing to her life but his sperm was one of her father’s close relatives. Of the four siblings, the eldest is their parents’ natural child, while Rhodes and at least one of her brothers were conceived during what appears to have been a long-running affair between their mother and the man we’ll call Lou.* Another brother is yet to be tested.

Like a Tom Thumb firecracker, the revelations have set off a chain reaction that’s sent a series of explosions rippling across provincial New Zealand. Lou died years ago, but is still well known in the town he was a respected member of the community and raised a family of his own, some still live locally. One of Lou’s sons agreed to a DNA test, which confirmed the liaison took place. For Rhodes, who’s in her 60s and lives in a small rural town, it comes as a complete shock. It’s getting harder and harder to keep secrets in our society, says US genetic genealogist CeCe Moore, who consults on genetic testing cases for the TV show Finding Your Roots, told the Atlantic last year. “If people haven’t come to that realisation, they probably should.”

Estimates of misattributed maternity range wildly, but in 2005 a New Zealand Law Commission report settled on a conservative rate of 1.8%. That might not sound like much, but it equates to about 80,000 people – nearly the entire population of Palmerston North. Genealogists research the number much higher. Some surveys have found that between 5% and 10% of people who take a DNA test discover their father isn’t who they thought he was, in circumstances that encompass infidelity, undisclosed adoptions, rape and even babies being switched at birth.

Rhodes’ DNA didn’t go looking for scandal, stumbling across it by chance. Yet there’s a sense she’s somehow at fault for causing a rupture in the family. One of her brothers initially struggled to cope and appeared to blame her for tainting his mother’s memory. “It’s certainly upset the family dynamics,” she says. “It’s almost like I have opened a door and let a ghost in.”

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THERE’S A GENEALOGICAL term for the way Rhodes’ world was upended through a spilt of saliva. It’s called a “non-paternity event” or NPE, a bloodless phrase for something so irrevocably life-altering.

The numbers are so alarming that the UK’s fertility regulator, the Human Fertilisation and Embryology Authority, has called on DNA-testing websites to warn people of the risk of uncovering traumatic family secrets, with anecdotal evidence suggesting two-thirds of people whose parents had fertility treatments have no idea they were donors or adoptees or conceived using a donor egg. Most stray DNA is paternal, but modern technology means it’s possible even the woman who gave birth to you may not be your mother by blood.

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“Some people will be fascinated their boring family is more exciting than they thought it was. Others will be horrified. When a child is born, I think they have every right to know where they come from, but often Mum has passed away or she won’t tell them anything. A lot of women take their secret to the grave.”

CATHERINE ST CLAIR, a music therapist who lives in Texas, was in her 50s when she was given a DNA test kit as a birthday present from her siblings – and discovered she had a different dad. By the time she traced her biological father, he had died. On the plus side, she’s found a couple of half sisters.

Two years ago, St Clair founded DNA NPE Friends, the US initiative mentioned earlier. Its closed Facebook group now has 6000 members from as far afield as Australia and New Zealand, and a non-profit fellowship has been established, providing grants to pay for DNA tests or help cover travel costs. It’s not unheard of for someone to finally track down a biological parent half a world away, only to be told they’re on their deathbed and to get on a plane without delay.

US-based spokesperson Rebekah Drumsta isn’t an NPE herself, but her aunt is. One of her uncles has also discovered a son he didn’t know existed. “Some of the stories are crazy,” she says. “We’ve had kidnapped, we’ve had switched at birth. We’ve had rape and incest. Maybe there was sex before marriage in a religious environment where that’s not supposed to happen. In the wild 60s, someone might have had multiple partners in a week and have no idea which one [the father] was. Or suddenly black people show up in a family tree, tracking back three generations to a plantation in the South. So people with racial biases are being challenged, too.”

The “loss” of a biological parent can trigger an identity crisis psychologists now recognise as a form of trauma, says Drumsta. “It’s a terrible thing to be,” she says. “People are having to face the decisions they made and see the effect of those choices carrying down from generation to generation. Whether it was something done to the mother, or something she chose, what our community feels is that what’s flowing through my veins is part of who I am. It’s my story and I have a right to know.”

David Lomas, who produces and presents Lost and Found, has reunited dozens of family members separated by time or circumstance. He calls applicants to the show “seekers” and, like Drumsta, believes they have a right to any information he finds on their biological parents and siblings, whether or not he’s able to broker a meeting. “It’s a terrible thing to have, that always wanting to know. You feel it in the gut,” he says. “And even with DNA, you’ve still got a lot of solving to do. It’s not just who the person is, but why?”

What Lomas tells them is this: we may not get a fairytale, but we don’t have to go to the grave thinking there was a fairytale out there they never found.”

For Wellington property manager Debbie Shute, who appeared on the show’s first season, it wasn’t a DNA test that flipped her world upside down but a phone call from her sister. Isn’t it crazy, dad. “She is devastated, and there is no-one she can talk to about it.”

Wilson-Waring was an early adopter of genetic testing: her mother was illegitimate but refused to discuss it, and she couldn’t talk to her grandmother about it because she had dementia. It was only at her mother’s funeral that a great-aunt fingered the prime suspect, who was later confirmed as her mother’s biological father via DNA. She says countries such as Australia and New Zealand that were settled by immigrants have snapped up ancestry kits, while uptake in the UK is comparatively low. “I think they like to keep their dirty laundry hidden.”

Now, genetic databases are growing so fast they’re reaching a tipping point, says Wilson-Waring, who predicts a “huge balloon” of cases in the next year will see skeletons come tumbling out. “This is a tsunami hitting the world,” she says. “People are having to face the decisions they made and see the effect of those choices carrying down from generation to generation. Whether it was something done to the mother, or something she chose, what our community feels is that what’s flowing through my veins is part of who I am. It’s my story and I have a right to know.”

For Wellington property manager Debbie Shute, who appeared on the show’s first season, it wasn’t a DNA test that flipped her world upside down but a phone call from her sister. "Isn’t it crazy, isn’t it?"
she said, that Dad isn’t your real father? Shute, who was 47 and married with a teenage son, had no idea what she was talking about. “Mum had passed away two years before, and Dad assumed she’d told me before she died. He and my sister thought I knew but hadn’t said anything, which they were a little upset about.”

It turned out Shute was a baby when her mother married the man who raised her as his own. The couple went on to have two more children and although Shute never felt treated differently, she remembers a nagging feeling that she looked a bit different and somehow didn’t quite fit in. When she approached her father, he told her everything he knew about him, which wasn’t a lot, she says. “He thought I had a right to know. I take my hat off to him; he did it.”

But I heard him on the phone the other day and he said, ‘I’ve got to go, my shot off overseas. Having a baby wasn’t what he wanted or expected at the time.’

Ray had fathered a daughter he’d never known. I take my hat off to him; he did it. He thought I had a right to know. He knew about him, which wasn’t a lot,” she says. “Some men feel really angry and don’t want anything to do with the mother or child. Others don’t care there’s no biological relationship and say, ‘I love this child and I want to stay in their life.’ It’s so complex. Sometimes a non-biological father knows the truth from the outset, thinking they’re doing the right thing for the benefit of the child to minimise the hurt. But people aren’t good at keeping secrets. Eventually someone spills the beans.”

Lawton says sometimes the secret is weighing on their mind, and they feel an obligation to tell the truth. “I was feeling really nervous,” she says. “I’d have liked Mum to be here, to ask her why she didn’t tell me. For a long time, I was disappointed and angry. Everyone else seemed to know! Since then, I’ve put a lot of things together and can understand it, as well. It was a different time, she was very young and it must have been hard on her. “There’s a bit of guilt there for Ray. It wasn’t a serious relationship and he shot off overseas. What did he want or expect at the time? What did he think of himself?”

He’s so proud it melts me. Everyone else seemed to know since then, I’ve put a lot of things together and can understand it, as well. It was a different time, she was very young and it must have been hard on her. “There’s a bit of guilt there for Ray. It wasn’t a serious relationship and he shot off overseas. What did he want or expect at the time? What did he think of himself?”

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A woman becomes pregnant by a man she’s never met. Both parties are unaware of the biological connection. The child is brought into the world. A relationship breaks down and the partner’s birth control for a placebo. In 2017, a Liverpool woman was sent to jail for 12 months after admitting tolying about the potential harm of unexpected results, in the same way there are cancer warnings on cigarette packs."

A retired butcher, Ray Twist lives near Christchurch. He was 74 and married with two small children. In the UK and Australia, men who have investigated issues around deceitful and disattributed paternity. “People aren’t good at keeping secrets,” she says. “Eventually someone spills the beans.”

US psychologist Robert Plomin’s book Blueprint. Known in academic circles for his longitudinal studies of twins and adopted children, he says the latest science shows genetics heavily influences everything from personality and verbal ability to traits such as kindness and grit.

However, Professor Quentin Atkinson, an evolutionary anthropologist at Auckland University, says the human species can create strong kinship connections even where there is no genetic link.

“There’s not a kind of magic dust that gets sprinkled over parent and offspring so they fall in love with one another. There are actual psychological mechanisms involved that create real bonds between a parent and child, and which can still work when there’s no genetic link,” he says. “A blood tie is less important than whether people feel they’re part of the family, or feel a connection with a father figure, whether biological or not. It can be just as meaningful.”

Jenny Rhodes won’t be changing her father’s name on her birth certificate. There’s a difference between shared genes and a shared heart, she says. And although things would be simpler if she hadn’t taken the DNA test, “I’m glad I did, because it affects life going forward from here. It affects my kids, it affects my grandchildren. Medical stuff is important and I don’t have the answers for half of my family.

“But Lou wasn’t a father to me. He didn’t have anything to do with bringing me up, with nurturing me. He didn’t contribute anything but sperm. That’s what I have to remind myself.”

FRAMED BY DNA

Should police have access to genealogy databases – and do the innocent have anything to fear?

NO WONDER DETECTIVES thought they had their man in a 2012 murder case in the United States that could have put 26-year-old Lukis Anderson on death row; his DNA was found on the victim’s fingernails. Even Anderson, a homeless alcoholic, thought he might have done it. Only some digging by a conscientious public defender showed he was actually in hospital across town, detoxing, when the killing took place.

It took months to work out what had happened. The two ambulance officers who picked a near-comatose Anderson off the street were the same paramedics later called to the murder scene, and had inadvertently transferred traces of Anderson’s DNA to the body.

Auckland private investigator Tim McKinnell, who helped overturn Teina Pora’s wrongful conviction for murder, says DNA has been a game changer for both the prosecution and the defence. But he warns we should tread with caution: people come with substantial risks. “We need to be careful we don’t create an environment where each of us must maintain a diary or record of where we have been and why, in case we are one day required to account for the presence of our DNA at a crime scene.”

Last year, a man dubbed the Golden State Killer was charged with a string of cold-case murders in California after investigators used the open-source genealogy website GEDmatch to compare DNA evidence with profiles stored on the database – scoring a hit when it matched a distant relative, leading them to the man now facing trial. So far, police here have ruled out accessing genealogical databases to identify possible suspects, but it’s one of a number of issues up for discussion in a Law Commission review. A final report is due to be released before the end of the year.

New Zealand was the second country in the world to create a legislative regime for the use of DNA in criminal investigations, but Law Commissioner Donna Buckingham says developments since it was introduced in 1995 “raise questions on which informed public debate is needed”. Currently, there are two DNA databases in New Zealand: one stores samples of unknown DNA found at crime scenes; the other holds genetic information of some 185,000 people charged with or convicted of certain crimes, or who have voluntarily supplied a sample.

Familial searches of these databases, looking for matches with unidentified DNA, are tightly restricted – although that, too, has been flagged by the Law Commission as an area for review. In California, where there are no such constraints, the strategy has led to at least another 10 high-profile arrests, including the so-called “Grim Sleeper” in Los Angeles and the “Roaming Rapist” in Sacramento. This March, DNA from the tears frozen on the face of a dead baby found abandoned in South Dakota 38 years ago was uploaded to a genealogy website; a match with relatives led to the boy’s mother being charged with murder.

The approach hasn’t been without controversy, however. Privacy concerns led to GEDmatch changing its policy in May, so people can choose whether to share their genetic information with criminal investigators rather than giving consent by default, while DNA-testing company FamilyTreeDNA now allows customers to opt out, after weathering a public backlash for working with the FBI.

Ancestry.com (the parent company of AncestryDNA) and 23andMe both say they do not engage with criminal investigations. “It’s our policy to resist any law-enforcement inquiries with all legal and practical means at our disposal,” 23andMe’s Andy Ackerman told the US media last year. Waikato University’s Andelka Phillips echoes Tim McKinnell’s concerns about how personal data might be used in criminal investigations. Prosecutors in the Golden State Killer case, she notes, are calling for the death penalty.

“People think, ‘It’s never going to be me,’ but the mere presence of DNA somewhere isn’t synonymous with guilt. Most of us can leave DNA traces virtually wherever we go without knowing it. It could have quite unpleasant consequences for people, and they may be innocent.”
WRITTEN IN THE GENES

Whether it’s resolving a mystery or revealing a secret, DNA has become a powerful tool. Here are just a handful of cases that have made headlines in the past few years.

• **February 2019** A woman in Phoenix, Arizona trying to trace her biological father takes a DNA test and finds she has a half sister, born just months apart, living in the same city; both were conceived by donor sperm from a New Zealand doctor who lived there in the early 1980s.

• **November 2018** UK millionaire Richard Mason claws back £4 million from a divorce settlement paid out to his ex-wife after a DNA test confirmed he was not the father of their three sons. Mason has been diagnosed with cystic fibrosis, a condition that leaves most men infertile.

• **April 2018** The DNA Doe Project announces it has solved its first cold case, identifying a murder victim known only as the “Buckskin Girl” after her body was found in a ditch in Ohio in 1981. Founded in 2017 by two American forensic genealogists, the project sequences DNA from unidentified bodies, then uses public database GEDMatch to look for relatives with an overlapping genetic profile.

• **September 2017** A High Court judge rules that former cabinet minister and Auckland mayor John Banks is the father of Japan-based English teacher Anthony Shaw. Banks had refused to undergo a DNA test, a fact Justice Patricia Courtney took into account when making a legal declaration “on the balance of probabilities” that Shaw was his biological son. Shaw had grown up believing his father was a Chinese man, Harry Wong, who paid child support for 15 years but wasn’t involved in raising him.

• **April 2016** Archbishop of Canterbury Justin Welby discovers through genetic testing that his real father was diplomat Sir Anthony Montague Browne (right), Winston Churchill’s private secretary.

• **August 2019** An Ohio couple file a lawsuit against a fertility clinic that swapped the husband’s sperm for a stranger’s. The man discovered he is not their daughter’s biological parent after the 24-year-old gave him an ancestry kit for Christmas.

• **August 2019** A woman conceived when her mother was raped as a 13-year-old by a family friend tells the BBC she wants her birth father prosecuted using her own DNA.

• **June 2019** A Canadian fertility specialist loses his medical licence for using the wrong sperm, including his own, to inseminate as many as 50 IVF patients.

• **May 2019** A 31-year-old labourer is confirmed via a DNA test as the biological heir of an English aristocrat who committed suicide in 2018, leaving behind an estate valued at £50 million.

“I’ve got DNA evidence because I am DNA evidence,” she says. “I’m a walking crime scene.”

“fuelled by a large amount of alcohol on both sides”, but didn’t realise he was the father.