MORE than two years after a man was charged with rape on the strength of DNA profiling, a state pathology centre has admitted it could have made a mistake when testing the evidence.

A leading defence DNA expert, NSW-based molecular geneticist Brian McDonald, says the case highlights the risks posed by databases and the reluctance of state laboratories to admit mistakes.

Dr McDonald says anything from a laboratory error to the planting of evidence might link someone on a database to a crime they did not commit.

In the West Australian rape case, PathWest has admitted it believes there may have been a "contamination event" or laboratory error in the man's case, prompting them to withdraw their report and leading prosecutors to discontinue the charges.

Defence lawyer Richard Utting said the case demonstrated potential dangers associated with an increasing reliance on DNA evidence.

His 44-year-old client was charged in December 2003 with five offences, including sexual penetration without consent and deprivation of liberty, arising from an alleged attack against a woman in November 1999.

The man denied the allegations and the woman could not identify her attacker, but the man was charged after DNA evidence was matched to his profile on the state database.

"He said he was not there and did not know anything about it ... it all came down to DNA," Mr Utting said.

A report by PathWest found there was a one-in-10 billion chance the DNA profile found in a sperm sample taken from the woman's swabs belonged to somebody else other than the man.

"That probably would have been enough to get him convicted," Mr Utting said.

But the man continued to deny the offence and Dr McDonald was employed to assess the case.

After numerous inquiries by Dr McDonald, PathWest withdrew the earlier report and acknowledged "there may have been a contamination event or a laboratory error during the DNA extraction process".

"Here is a man who is presumed innocent and said he did not do it and yet he is facing the possibility of going to jail," Mr Utting said.

"For this sort of thing you would get at least six years."

Dr McDonald said the explanation for the mistake remained a mystery, though he suspected one of the accused man's original samples from the database had been mislabelled and confused with a sample from the rape case.

"I still have not seen an official report which, under their accreditation guidelines, they must issue," he said.

Dr McDonald said PathWest reports had been withdrawn in several other West Australian cases, which indicated the laboratory
was using inappropriate statistical calculations that risked producing flawed results.

"It is quite possible people have been convicted on the strength of flawed results presented by the laboratory," he said.

"Usually in cases where reports have had to be withdrawn, there is an examination of the reasons, a correction and a review of past cases."

Dr McDonald, who has worked on criminal cases across the nation for more than a decade, said he was also alarmed by PathWest's statement that it did not have any further portions of the affected samples to enable it to verify its original findings in the rape case.

"The horror of this error relates to a problem with the databases and the failure to manage them effectively," Dr McDonald said.

The management of DNA databases should be delegated to an independent agency, he said.

PathWest would not comment yesterday as the case remained with the DPP.