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## **Typhoid-water contamination**

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THE Mineral Resources Department is concerned that water source contamination has occurred in Jittu Estate and contributed to the spread of typhoid.

Geological Services Division manager Malakai Finau said the Jittu Estate case was of great concern because the people used piped water.

Mr Finau said previous cases of water source contamination occurred mostly in rural areas where supplies were generally not well protected.

He said water sources could be contaminated in many ways.

However, sources are affected by typhoid bacterium (*salmonella typhi*) and other bacteria through contamination of ground or surface water by human or animal faeces.

"Such contamination may be discharged directly or indirectly to water sources and they may be from a discrete source such as a pipe from a sewage plant in which case they are referred to as point source pollution. On the other hand the contamination could originate from a large area and not from a single discrete source," he said.

Mr Finau said the effect could worsen during flooding if water sources became contaminated and then overflowed into other areas.

He said contamination of water sources was one way in which the disease causing bacteria could be spread from one water source to another.

"If the public comes into contact with such water do not take heed of messages and advice provided by the Ministry of Health or practice basic hygiene, they face the risk of been affected," he said.

Mr Finau said the outbreak of water-borne diseases such as typhoid had brought to attention the importance and urgency of water source protection from bacterial and other sources of contamination harmful to the public.

"Whilst this is a step in the right direction a more holistic and comprehensive approach is better and the concept of Water Safety Plan by the World Health Organisation (WHO) which manages drinking water quality from catchment to consumer is recommended," he said.