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| **To:** | Web page advice for doctors |
| **From:** | Dr Chris Mansell clinical microbiologist, Dr Stephen Du Toit chemical pathologist |
| **Date:** | 21/12/2020 |
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| **Subject:** | Gentamicin level testing – limited reagent |

The laboratory will most likely run out of gentamicin testing reagent within the next few weeks but the exact date when this will occur is uncertain and largely unpredictable.

**If Gentamicin levels will be required, an alternative antibiotic should be used if possible.**

Due to a worldwide supply problem, we did not receive our gentamicin reagent on time, which is now expected to arrive around the middle of January 2021. There is enough reagent for Amikacin and Tobramycin levels.

Specialised information:

In most cases, gentamicin is only used for one or two doses and monitoring isn't be needed.

In most cases, by the time a gentamicin level is required by protocol, the organism has been identified and tested and an alternative, effective antibiotic is known.

If longer treatment with monitoring is needed, tobramycin may be used instead of gent and we can measure tobra levels. Milligram doses and target levels are the same as for gentamicin. The mechanism of action and antimicrobial spectrum of tobramycin are the same as for gentamicin. In the Waikato, 98.5% of E. coli class organisms which were susceptible to gentamicin were also susceptible to tobramycin. The marginally better coverage of gentamicin is one reason it is recommended for empiric treatment. Note that 6.5% overall were resistant to gentamicin.