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## ENVIRONMENTAL AND TOXICOLOGICAL RISK OF USING QUATERNARY AMMONIUM SALTS

### Summary

The wide use of quaternary ammonium compounds (QACs), mostly as surfactants and disinfectants, may cause a threat both to the environment and human health. This article presents characteristics and use of QACs, their occurrence in the environment, antimicrobial activity and toxicity to the environment and the man. Approximately 25% of used QACs enter the environment mainly with sewage. Aquatic organisms, especially algae, are very sensitive to these compounds. The presence of QACs in soil causes oxidative stress in plants. The people are exposed to the contact with these substances mainly in places of their production and usage. The most common symptoms of exposure to QACs are contact dermatitis, irritation of respiratory system and allergies. Furthermore, QACs may induce mutations and becoming cancerogenic.