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## Development of air quality control technology to control infectious diseases (vol.2)

### - Evaluation and demonstration of the removal performance of airborne viruses by air spraying of water and aromatic water -

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In order to develop a countermeasure technology against infectious diseases by space spraying that can be used in a manned environment, it would be beneficial to confirm the removal performance of distilled water, tap water and aroma water, in which essential oils are diluted to 0.1% with water, against floating viruses when sprayed in a space. As a result, it was found that distilled water and aroma water could potentially be effective in removing more than 99% of floating viruses at 90minutes from the start of the test. Furthermore, the infection status of office workers was monitored in an office where aroma water was sprayed in accordance with the spraying conditions based on the test results. As a result, only one person was infected, despite an influenza alert being issued in September and October, which was the middle period of the year. Thereafter, although the spread of infection was observed during the winter season, it was confirmed that increasing the spraying time of the ultrasonic sprayer from 1min/h to 4min/h had a positive effect, and the clusters were suppressed.

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