

Cage size, movement in and out of housing during daily care, and other environmental and population health risk factors for feline upper respiratory disease in nine North American animal shelters.

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Abstract

Upper respiratory infection (URI) is not an inevitable consequence of sheltering homeless cats. This study documents variation in risk of URI between nine North American shelters; determines whether this reflects variation in pathogen frequency on intake or differences in transmission and expression of disease; and identifies modifiable environmental and group health factors linked to risk for URI. This study demonstrated that although periodic introduction of pathogens into shelter populations may be inevitable, disease resulting from those pathogens is not. Housing and care of cats, particularly during their first week of stay in an animal shelter environment, significantly affects the rate of upper respiratory infection.

Results and Conclusion

URI is not an inevitable consequence of sheltering homeless cats. Housing and care of cats, particularly during their first week of stay in the shelter environment, significantly affects the rate of upper respiratory infection. This study demonstrated that cage floor space $>8\text{ft}^2$ and <2 housing moves during the first week in the shelter were significantly associated lower risk for URI in adult cats. Change in housing has been previously associated with stress and activation of feline herpesvirus. The type of housing associated with reduced URI risk may reflect lower stress levels for cats, and therefore may serve as an indicator that the shelter environment is more successfully meeting the cats' needs for comfort and well-being.