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Burden of respiratory syncytial virus infection in community-dwelling older adults in Europe (RESCEU): an international prospective cohort study

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Respiratory syncytial virus (RSV) infection in older adults is recognised, but the burden in the community is still uncertain. This European study found that RSV infection is prevalent but rarely caused severe disease in community-dwelling older adults. <https://bit.ly/30gsiMD>

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ABSTRACT

Background: Respiratory syncytial virus (RSV) infection in older adults is recognised as an important health issue. We aimed to assess the community burden of RSV in Europe in older adults aged ≥ 60 years.

Methods: This international, prospective, observational cohort study is part of work by the REspiratory Syncytial virus Consortium in EUrope (RESCEU). Participants were recruited through general practitioners' (GPs) offices before two independent RSV seasons. Participants reported weekly about symptoms of acute respiratory tract infection (ARTI) during one RSV season. ARTI patients were tested for RSV during home visits and completed a daily symptom diary. RSV illness included PCR-confirmed ARTI and those showing seroconversion over the season. RSV ARTI was based on PCR alone (ClinicalTrials.gov, NCT03621930).

Results: We recruited 1040 participants (527 in season 2017–2018 and 513 in season 2018–2019) with a median age of 75 years (range 60–100 years). Of these, 1023 (99%) lived independently at home at baseline. RSV illness incidence was 22 out of 527 (4.2%) and 37 out of 513 (7.2%) in the respective seasons. RSV illness did not affect frailty or cardiopulmonary status during the course of the study. No patients were hospitalised or died from RSV illness. In the 36 patients with PCR confirmed RSV ARTI, symptom duration averaged 19 days, while a doctor's visit took place in 11 out of 36 cases (31%). RSV ARTI could not be differentiated clinically from all other ARTIs based on symptoms.

Conclusion: This European study showed that RSV is prevalent in community-dwelling older adults and rarely causes severe disease. This suggests that watchful waiting, using a continuity of care approach to identify those who do need more intensive care, is often justified when RSV is suspected in family practice.