

**Risk factors of severe pneumonia among children aged 2-59 months in western Kenya: a case control study.**

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<http://hinari-gw.who.int/whalecomwww.ncbi.nlm.nih.gov/whalecom0/pubmed/23330036>

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**Abstract:**

**INTRODUCTION:** Globally, pneumonia is the leading cause of death in children under the age of 5 years. In Kenya, it is the second leading cause of mortality, accounting for greater than 30,000 deaths in this age group annually. This study sought to identify risk factors for severe pneumonia in children under the age of five years. **METHODS:** We conducted a case control study. Cases were children aged 2 to 59 months with severe pneumonia or very severe pneumonia and controls were those with non-severe pneumonia as defined by the integrated management of childhood illnesses classification. We administered structured questionnaires to mothers of participants to obtain data on socio-demographics, nutritional status and potential environmental risk factors. Data was analyzed using Epi Info; significance level was set at 0.05. **RESULTS:** We recruited 103 cases and 103 controls. The median age of cases was 14.0 (Range 3-58) months and of controls 14.0 (Range 2-54) months. Comorbidity (Odds Ratio = 3.8, Confidence Interval 1.4-10.6), delay in seeking treatment for three days or more (Odds Ratio = 2.3, Confidence Interval 1.2-4.2) and contact with upper respiratory tract infection (Odds Ratio = 2.7, Confidence Interval 1.1-6.5) were independent risk factors for severe pneumonia. Receiving antibiotics at home (Odds Ratio = 0.4, Confidence Interval 0.2-0.8) was protective. **CONCLUSION:** Co-morbidity, contact with upper respiratory tract infection and delay in seeking treatment are risk factors for severe pneumonia. We recommend health education regarding appropriate health seeking and engaging community health workers in pneumonia prevention, control and treatment.