# CURB-65 Score for Pneumonia Severity

## INPUTS

|  |  |
| --- | --- |
| Confusion | **Options:**   * No (0) * Yes (1) |
| BUN >19 mg/dL (>7 mmol/L urea) | **Options:**   * No (0) * Yes (1) |
| Respiratory Rate ≥30 | **Options:**   * No (0) * Yes (1) |
| Systolic BP <90 mmHg or Diastolic BP ≤60 mmHg | **Options:**   * No (0) * Yes (1) |
| Age ≥65 | **Options:**   * No (0) * Yes (1) |

## FORMULA

Addition of the selected points, as above.

## FACTS & FIGURES

**Score interpretation (as per derivation study):**

|  |  |  |
| --- | --- | --- |
| CURB-65 score | Mortality Risk | Recommendation per Derivation Study |
| 0 | 0.60% | Low risk; consider home treatment |
| 1 | 2.70% | Low risk; consider home treatment |
| 2 | 6.80% | Short inpatient hospitalization or closely supervised outpatient treatment |
| 3 | 14.00% | Severe pneumonia; hospitalize and consider admitting to intensive care |
| 4 or 5 | 27.80% | Severe pneumonia; hospitalize and consider admitting to intensive care |

## EVIDENCE APPRAISAL

The original study was a retrospective review of three prospective studies of CAP in the UK, New Zealand, and the Netherlands. It included a total of 1068 patients. A five-point score based on confusion, urea, respiratory rate, blood pressure, and age was developed to stratify patients into different treatment group based on mortality risk. The validation study was done in India and included 150 patients.

CURB-65’s original study including co-morbidity variables like chronic lung disease, chronic liver disease, CHF, CVD, and DM, and these were controlled for when developing the relevant criteria for the risk stratification that ultimately led to CURB-65’s risk factors.

Several other more recent validation studies in several different countries show increasing mortality and even need for intubation with increasing CURB-65 scores, ranging from 0-1.1% (CURB-65 score = 0) to 17-60% (CURB-65 score = 5), with over 3100 patients in these studies when combined.