Author, Year Country Study Design Sample Size	Population Intervention Outcome Measure	Results
(Vogel et al., 2002b) USA Observational N=216	Population: Age at injury: 14.1±4.0 yr; Age at interview: 28.6±3.4 yr; Gender: males=150, females=66; Time since injury: 14.2±4.6 yr; Level of injury: tetraplegia=123, paraplegia=93. Severity of injury: C1-4 ABC=41, C5-8 ABC=67, T1- S5 ABC=82, tetra/para D=26. Intervention: None. Survey. Outcome Measures: Prevalence of respiratory complications.	 In total, 68 subjects experienced pneumonia at least once, and 17 had required temporary or chronic ventilation since their injury. Of the 68 subjects who had pneumonia, 39 experienced 1 episode, 10 had 2 episodes, and 19 had 3+ episodes. Of 71 individuals who experienced pneumonia or respiratory failure were older at follow-up (p=0.028) and had longer duration of SCI (p=0.002). Those with pulmonary complications had significantly more severe neurologic impairments with lower ASIA Motor scores (p<0.001). Individuals with tetraplegia were more likely than those with paraplegia to have respiratory complications (p=0.003). In addition, respiratory complications most commonly affected those in the more severe injury groups (C1-8) compared with those with less severe injuries (TI-S5, tetra/para D) (p=0.005). Those with respiratory complications had lower total (p=0.003) and motor (p=0.003) FIM scores. A total of 59 subjects required hospitalizations within 3 yr of their interview and the most common reasons were respiratory disorders (N=13).