Background Rip currents are narrow, strong currents that move seaward through the surf zone. Rip currents are the number one drowning hazard on surf beaches globally. A comprehensive review of rip current related drowning and rescue has not been reported to date.

Aims To describe rip current related drowning deaths and rescues in Australia from 2004 to 2011.

Methods A retrospective search was undertaken for fatal and non-fatal rip related drowning incidents in Australia from the National Coroner’s Information System (NCIS), SurfGuard Incident Reporting Database (IRD), and Media Monitors, between 1 July 2004 and 30 June 2011.

Results There were 629 fatal coastal drowning deaths recorded and rip currents were a factor in 145 fatalities (22.9%), an average of 21 per year. There were a total of 1246 ‘major rescues’, lifesavers reported the involvement of rip currents in 602 rescues (48.3%), an average of 86 per year.

Significance Using similar data sets from life saving organisations in the USA, UK, and NZ an international range of 48.3%–57.9% of all rescues are rip related, which is comparable to Australia. Rip related events are common though preventable. Priority strategies for rip related drowning prevention include educating beachgoers to: swim between the flags; identify rip currents; and appropriate responses if caught in a rip. Interventions should target young males in particular, as they are overrepresented in rip related drowning and rescue incidents.