Demographic tables

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# Ethnicity by age group

lumped\_age <- wave2\_data %>%   
 filter(resp\_age\_5yr %in% c("18-24", "25-29", "30-34", "35-39", "40-44")) %>%   
 mutate(resp\_age\_grps = case\_when(  
 resp\_age\_5yr %in% c("35-39", "40-44") ~ "35-44",  
 TRUE ~ as.character(resp\_age\_5yr)  
 ))  
  
  
eth\_frame <- lumped\_age %>%   
 mutate(qethnicity = fct\_collapse(replace\_na(qethnicity, "Prefer not to say"), "Prefer not to say/no answer" = "Prefer not to say")) %>%   
 group\_by(qethnicity, resp\_age\_grps) %>%   
 summarise(n = n()) %>%   
 bind\_rows(., summarise(., n = sum(n)) %>% mutate(resp\_age\_grps = "All")) %>%   
 mutate(all = max(n),  
 perc = n/all) %>%   
 rowwise() %>%   
 mutate(ci\_l = binom.test(n, all)$conf.int[[1]],  
 ci\_u = binom.test(n, all)$conf.int[[2]],  
 across(c(perc, ci\_l, ci\_u), ~paste0(as.character(round(.x\*100, 1)), "%")),  
 perc\_label = paste0(perc, " (", ci\_l, "-", ci\_u, ")"))

## `summarise()` has grouped output by 'qethnicity'. You can override using the `.groups` argument.

eth\_frame %>%   
 ungroup() %>%  
 select("Ethnicity" = qethnicity, resp\_age\_grps, n, `All ages` = all, "% (95%CI)" = perc\_label) %>%   
 pivot\_wider(names\_from = c("resp\_age\_grps"), values\_from = c("n", "% (95%CI)"), names\_glue = "{resp\_age\_grps}\_{.value}") %>%   
 gt(rowname\_col = "qethnicity") %>%   
 tab\_spanner\_delim(delim = "\_") %>%   
 cols\_move\_to\_end(`All ages`)