

Results tables

Weekly lags

```
# function to calculate a RR and confidence interval from one of our
# neg bin gams, and output them in 3 length 3 vectors: RR, lw, up.
week_RR_vectors <- function(weekly_model) {
  RR_week1 <- sprintf("%04.2f", round(exp(weekly_model$coefficients[[2]]) ^ 10, digits = 2))
  RR_week2 <- sprintf("%04.2f", round(exp(weekly_model$coefficients[[3]]) ^ 10, digits = 2))
  RR_week3 <- sprintf("%04.2f", round(exp(weekly_model$coefficients[[4]]) ^ 10, digits = 2))
  lw_week1 <-
    sprintf("%04.2f", round(exp(weekly_model$coefficients[[2]] - sqrt(vcov(weekly_model)[2, 2]) * 1.96)
    10, digits = 2))
  up_week1 <-
    sprintf("%04.2f", round(exp(weekly_model$coefficients[[2]] + sqrt(vcov(weekly_model)[2, 2]) * 1.96)
    10, digits = 2))
  lw_week2 <-
    sprintf("%04.2f", round(exp(weekly_model$coefficients[[3]] - sqrt(vcov(weekly_model)[3, 3]) * 1.96)
    10, digits = 2))
  up_week2 <-
    sprintf("%04.2f", round(exp(weekly_model$coefficients[[3]] + sqrt(vcov(weekly_model)[3, 3]) * 1.96)
    10, digits = 2))
  lw_week3 <-
    sprintf("%04.2f", round(exp(weekly_model$coefficients[[4]] - sqrt(vcov(weekly_model)[4, 4]) * 1.96)
    10, digits = 2))
  up_week3 <-
    sprintf("%04.2f", round(exp(weekly_model$coefficients[[4]] + sqrt(vcov(weekly_model)[4, 4]) * 1.96)
    10, digits = 2))
  lag_week_1 <- paste0(RR_week1, ' [', lw_week1, ', ', up_week1, ']')
  lag_week_2 <- paste0(RR_week2, ' [', lw_week2, ', ', up_week2, ']')
  lag_week_3 <- paste0(RR_week3, ' [', lw_week3, ', ', up_week3, ']')
  all <- c(lag_week_1, lag_week_2, lag_week_3)
  return(all)
}
```

```
# identify main 3 week lag models
week_penalized_spline_outpatient <- all_pm_models[[18]]
week_penalized_spline_inpatient <- all_pm_models[[10]]
week_penalized_spline_ED <- all_pm_models[[2]]
week_penalized_spline_inpatient_cardioresp <- all_pm_models[[12]]
week_penalized_spline_ED_cardioresp <- all_pm_models[[4]]

# make table of results
s1 <- week_RR_vectors(week_penalized_spline_outpatient)
s2 <- week_RR_vectors(week_penalized_spline_inpatient)
s3 <- week_RR_vectors(week_penalized_spline_ED)
```

```

s4 <- week_RR_vectors(week_penalized_spline_inpatient_cardioresp)
s5 <- week_RR_vectors(week_penalized_spline_ED_cardioresp)

weekly_lags_penalized_spline <- rbind(s1, s2, s3, s4, s5)
colnames(weekly_lags_penalized_spline) <-
  c('lag 0 weeks', 'lag 1 week', 'lag 2 weeks')

knitr::kable(weekly_lags_penalized_spline)

```

| | lag 0 weeks | lag 1 week | lag 2 weeks |
|----|-------------------|-------------------|-------------------|
| s1 | 1.10 [1.04, 1.17] | 1.04 [1.00, 1.09] | 1.05 [1.02, 1.09] |
| s2 | 1.01 [0.84, 1.20] | 1.08 [0.94, 1.23] | 0.99 [0.85, 1.15] |
| s3 | 1.03 [0.90, 1.19] | 0.99 [0.88, 1.11] | 1.02 [0.92, 1.14] |
| s4 | 0.94 [0.78, 1.12] | 1.10 [0.96, 1.27] | 0.98 [0.85, 1.15] |
| s5 | 1.07 [0.92, 1.26] | 0.96 [0.84, 1.10] | 1.02 [0.91, 1.15] |

```

# sensitivity analysis week lag models
week_ns_outpatient <- all_pm_models[[17]]
week_ns_inpatient <- all_pm_models[[9]]
week_ns_ED <- all_pm_models[[1]]
week_ns_inpatient_cardioresp <- all_pm_models[[11]]
week_ns_ED_cardioresp <- all_pm_models[[3]]

t1 <- week_RR_vectors(week_ns_outpatient)
t2 <- week_RR_vectors(week_ns_inpatient)
t3 <- week_RR_vectors(week_ns_ED)
t4 <- week_RR_vectors(week_ns_inpatient_cardioresp)
t5 <- week_RR_vectors(week_ns_ED_cardioresp)

weekly_lags_natural_spline <- rbind(t1, t2, t3, t4, t5)
colnames(weekly_lags_natural_spline) <-
  c('lag 0 weeks', 'lag 1 week', 'lag 2 weeks')

knitr::kable(weekly_lags_natural_spline)

```

| | lag 0 weeks | lag 1 week | lag 2 weeks |
|----|-------------------|-------------------|-------------------|
| t1 | 1.21 [1.15, 1.27] | 1.01 [0.97, 1.05] | 1.06 [1.02, 1.10] |
| t2 | 0.98 [0.83, 1.17] | 1.09 [0.95, 1.24] | 0.99 [0.85, 1.15] |
| t3 | 1.04 [0.91, 1.18] | 0.99 [0.89, 1.11] | 1.02 [0.91, 1.13] |
| t4 | 0.91 [0.76, 1.10] | 1.11 [0.97, 1.28] | 0.99 [0.85, 1.15] |
| t5 | 1.10 [0.95, 1.26] | 0.95 [0.84, 1.09] | 1.02 [0.90, 1.15] |

Daily lags

```

# function to calculate a RR and confidence interval from one of our
# neg bin gams, and output them in 3 length 3 vectors: RR, lw, up.
day_RR_vectors <- function(daily_model) {

```

```

RR_day1 <- round(exp(daily_model$coefficients[[2]]) ^ 10, digits = 2)
RR_day2 <- round(exp(daily_model$coefficients[[3]]) ^ 10, digits = 2)
RR_day3 <- round(exp(daily_model$coefficients[[4]]) ^ 10, digits = 2)
RR_day4 <- round(exp(daily_model$coefficients[[5]]) ^ 10, digits = 2)
RR_day5 <- round(exp(daily_model$coefficients[[6]]) ^ 10, digits = 2)
RR_day6 <- round(exp(daily_model$coefficients[[7]]) ^ 10, digits = 2)
RR_day7 <- round(exp(daily_model$coefficients[[8]]) ^ 10, digits = 2)
lw_day1 <-
  round(exp(daily_model$coefficients[[2]] - sqrt(vcov(daily_model)[2, 2]) * 1.96) ^
    10, digits = 2)
up_day1 <-
  round(exp(daily_model$coefficients[[2]] + sqrt(vcov(daily_model)[2, 2]) * 1.96) ^
    10, digits = 2)
lw_day2 <-
  round(exp(daily_model$coefficients[[3]] - sqrt(vcov(daily_model)[3, 3]) * 1.96) ^
    10, digits = 2)
up_day2 <-
  round(exp(daily_model$coefficients[[3]] + sqrt(vcov(daily_model)[3, 3]) * 1.96) ^
    10, digits = 2)
lw_day3 <-
  round(exp(daily_model$coefficients[[4]] - sqrt(vcov(daily_model)[4, 4]) * 1.96) ^
    10, digits = 2)
up_day3 <-
  round(exp(daily_model$coefficients[[4]] + sqrt(vcov(daily_model)[4, 4]) * 1.96) ^
    10, digits = 2)
lw_day4 <-
  round(exp(daily_model$coefficients[[5]] - sqrt(vcov(daily_model)[5, 5]) * 1.96) ^
    10, digits = 2)
up_day4 <-
  round(exp(daily_model$coefficients[[5]] + sqrt(vcov(daily_model)[5, 5]) * 1.96) ^
    10, digits = 2)
lw_day5 <-
  round(exp(daily_model$coefficients[[6]] - sqrt(vcov(daily_model)[6, 6]) * 1.96) ^
    10, digits = 2)
up_day5 <-
  round(exp(daily_model$coefficients[[6]] + sqrt(vcov(daily_model)[6, 6]) * 1.96) ^
    10, digits = 2)
lw_day6 <-
  round(exp(daily_model$coefficients[[7]] - sqrt(vcov(daily_model)[7, 7]) * 1.96) ^
    10, digits = 2)
up_day6 <-
  round(exp(daily_model$coefficients[[7]] + sqrt(vcov(daily_model)[7, 7]) * 1.96) ^
    10, digits = 2)
lw_day7 <-
  round(exp(daily_model$coefficients[[8]] - sqrt(vcov(daily_model)[8, 8]) * 1.96) ^
    10, digits = 2)
up_day7 <-
  round(exp(daily_model$coefficients[[8]] + sqrt(vcov(daily_model)[8, 8]) * 1.96) ^
    10, digits = 2)

lag_day_1 <- paste0(RR_day1, ' [', lw_day1, ', ', up_day1, ']')
lag_day_2 <- paste0(RR_day2, ' [', lw_day2, ', ', up_day2, ']')
lag_day_3 <- paste0(RR_day3, ' [', lw_day3, ', ', up_day3, ']')

```

```

lag_day_4 <- paste0(RR_day4, ' [' , lw_day4, ', ', up_day4, ']')
lag_day_5 <- paste0(RR_day5, ' [' , lw_day5, ', ', up_day5, ']')
lag_day_6 <- paste0(RR_day6, ' [' , lw_day6, ', ', up_day6, ']')
lag_day_7 <- paste0(RR_day7, ' [' , lw_day7, ', ', up_day7, ']')
all <- c(lag_day_1, lag_day_2, lag_day_3, lag_day_4, lag_day_5,
        lag_day_6, lag_day_7)
return(all)
}

```

```

# identify main daily lag models
penalized_spline_outpatient <- all_pm_models[[20]]
penalized_spline_inpatient <- all_pm_models[[16]]
penalized_spline_ED <- all_pm_models[[8]]
penalized_spline_inpatient_cardioresp <- all_pm_models[[14]]
penalized_spline_ED_cardioresp <- all_pm_models[[6]]

# make table of results
s1 <- day_RR_vectors(penalized_spline_outpatient)
s2 <- day_RR_vectors(penalized_spline_inpatient)
s3 <- day_RR_vectors(penalized_spline_ED)
s4 <- day_RR_vectors(penalized_spline_inpatient_cardioresp)
s5 <- day_RR_vectors(penalized_spline_ED_cardioresp)

daily_lags_penalized_spline <- rbind(s1, s2, s3, s4, s5)
colnames(daily_lags_penalized_spline) <-
  c('lag 0 days', 'lag 1 day', 'lag 2 days', 'lag 3 days',
    'lag 4 days', 'lag 5 days', 'lag 6 days')

knitr::kable(daily_lags_penalized_spline)

```

| | lag 0 days | lag 1 day | lag 2 days | lag 3 days | lag 4 days | lag 5 days | lag 6 days |
|----|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| s1 | 0.98 [0.96, 1.01] | 0.96 [0.94, 0.99] | 1.03 [1, 1.06] | 1.08 [1.05, 1.11] | 0.98 [0.95, 1.02] | 1.07 [1.04, 1.1] | 1.12 [1.09, 1.16] |
| s2 | 0.94 [0.84, 1.04] | 1.01 [0.93, 1.1] | 0.95 [0.84, 1.08] | 0.87 [0.76, 1] | 0.98 [0.87, 1.12] | 0.93 [0.81, 1.06] | 1.02 [0.89, 1.16] |
| s3 | 0.97 [0.91, 1.04] | 1.02 [0.96, 1.08] | 0.98 [0.89, 1.07] | 0.96 [0.88, 1.06] | 0.95 [0.86, 1.04] | 1.03 [0.93, 1.13] | 0.92 [0.82, 1.02] |
| s4 | 0.91 [0.81, 1.02] | 1.03 [0.95, 1.12] | 0.93 [0.82, 1.07] | 0.91 [0.79, 1.05] | 0.97 [0.85, 1.1] | 0.91 [0.79, 1.05] | 0.99 [0.86, 1.14] |
| s5 | 0.99 [0.92, 1.07] | 0.99 [0.91, 1.08] | 0.96 [0.87, 1.07] | 0.99 [0.89, 1.1] | 0.92 [0.83, 1.03] | 1.01 [0.91, 1.13] | 0.89 [0.79, 1.01] |

```

# sensitivity analysis day lag models
ns_outpatient <- all_pm_models[[19]]
ns_inpatient <- all_pm_models[[15]]
ns_ED <- all_pm_models[[7]]
ns_inpatient_cardioresp <- all_pm_models[[13]]
ns_ED_cardioresp <- all_pm_models[[5]]

t1 <- day_RR_vectors(ns_outpatient)
t2 <- day_RR_vectors(ns_inpatient)

```

```

t3 <- day_RR_vectors(ns_ED)
t4 <- day_RR_vectors(ns_inpatient_cardioresp)
t5 <- day_RR_vectors(ns_ED_cardioresp)

daily_lags_natural_spline <- rbind(t1, t2, t3, t4, t5)
colnames(daily_lags_natural_spline) <-
  c('lag 0 days', 'lag 1 day', 'lag 2 days', 'lag 3 days',
    'lag 4 days', 'lag 5 days', 'lag 6 days')

knitr::kable(daily_lags_natural_spline)

```

| | lag 0 days | lag 1 day | lag 2 days | lag 3 days | lag 4 days | lag 5 days | lag 6 days |
|----|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| t1 | 0.99 [0.97, 1.02] | 0.97 [0.95, 1] | 1.04 [1.01, 1.07] | 1.09 [1.06, 1.12] | 0.99 [0.96, 1.03] | 1.07 [1.04, 1.1] | 1.12 [1.09, 1.15] |
| t2 | 0.94 [0.84, 1.04] | 1.02 [0.94, 1.1] | 0.96 [0.86, 1.08] | 0.89 [0.79, 1.01] | 0.98 [0.89, 1.08] | 0.95 [0.85, 1.07] | 1 [0.91, 1.1] |
| t3 | 0.97 [0.91, 1.04] | 1.02 [0.97, 1.08] | 0.99 [0.91, 1.07] | 0.97 [0.89, 1.06] | 0.96 [0.88, 1.05] | 1.02 [0.94, 1.11] | 0.93 [0.85, 1.03] |
| t4 | 0.91 [0.81, 1.02] | 1.03 [0.95, 1.11] | 0.95 [0.84, 1.07] | 0.93 [0.82, 1.04] | 0.97 [0.87, 1.08] | 0.93 [0.81, 1.05] | 0.98 [0.88, 1.09] |
| t5 | 0.99 [0.92, 1.07] | 0.99 [0.91, 1.08] | 0.97 [0.88, 1.07] | 1 [0.91, 1.1] | 0.93 [0.84, 1.04] | 1.02 [0.92, 1.12] | 0.9 [0.81, 1.01] |

DID wildfire exposure stuff.

```

# function to produce proximity results tables
DID_RR_vectors <- function(fire_exposure_model) {
  did_rr <- sprintf("%04.2f", round(exp(fire_exposure_model$coefficients[4]), digits = 2))
  did_lw <- sprintf("%04.2f", round(exp(fire_exposure_model$coefficients[4] - sqrt(vcov(fire_exposure_model$coefficients[4])))
  did_up <- sprintf("%04.2f", round(exp(fire_exposure_model$coefficients[4] + sqrt(vcov(fire_exposure_model$coefficients[4])))
  did_row <- paste0(did_rr, ' ', did_lw, ' ', did_up, ' ')
  return(did_row)
}

```

```

filenames <- list.files(
  here("analysis", "proximity_analyses", "results"),
  pattern = "*.RDS",
  full.names = TRUE
)
all_proximity_models <- lapply(X = filenames, FUN = readRDS)

woolsey_both_outpatient <- all_proximity_models[[38]]
woolsey_both_inpatient <- all_proximity_models[[30]]
woolsey_both_ED <- all_proximity_models[[22]]
woolsey_both_inpatient_cardioresp <- all_proximity_models[[32]]
woolsey_both_ED_cardioresp <- all_proximity_models[[24]]

woolsey_fire_outpatient <- all_proximity_models[[40]]
woolsey_fire_inpatient <- all_proximity_models[[36]]

```

```

woolsey_fire_ED <- all_proximity_models[[28]]
woolsey_fire_inpatient_cardioresp <- all_proximity_models[[34]]
woolsey_fire_ED_cardioresp <- all_proximity_models[[24]]

woolsey_evac_outpatient <- all_proximity_models[[39]]
woolsey_evac_inpatient <- all_proximity_models[[35]]
woolsey_evac_ED <- all_proximity_models[[27]]
woolsey_evac_inpatient_cardioresp <- all_proximity_models[[33]]
woolsey_evac_ED_cardioresp <- all_proximity_models[[25]]

getty_both_outpatient <- all_proximity_models[[18]]
getty_both_inpatient <- all_proximity_models[[10]]
getty_both_ED <- all_proximity_models[[2]]
getty_both_inpatient_cardioresp <- all_proximity_models[[12]]
getty_both_ED_cardioresp <- all_proximity_models[[4]]

getty_fire_outpatient <- all_proximity_models[[20]]
getty_fire_inpatient <- all_proximity_models[[16]]
getty_fire_ED <- all_proximity_models[[8]]
getty_fire_inpatient_cardioresp <- all_proximity_models[[14]]
getty_fire_ED_cardioresp <- all_proximity_models[[6]]

getty_evac_outpatient <- all_proximity_models[[19]]
getty_evac_inpatient <- all_proximity_models[[15]]
getty_evac_ED <- all_proximity_models[[7]]
getty_evac_inpatient_cardioresp <- all_proximity_models[[13]]
getty_evac_ED_cardioresp <- all_proximity_models[[5]]

# woolsey tables
q1 <- DID_RR_vectors(woolsey_both_outpatient)
q2 <- DID_RR_vectors(woolsey_both_inpatient)
q3 <- DID_RR_vectors(woolsey_both_ED)
q4 <- DID_RR_vectors(woolsey_both_inpatient_cardioresp)
q5 <- DID_RR_vectors(woolsey_both_ED_cardioresp)

woolsey_fire_both <- rbind(q1, q2, q3, q4, q5)
knitr::kable(woolsey_fire_both)

```

| | | |
|----|------|--------------|
| q1 | 0.88 | [0.78, 0.98] |
| q2 | 1.36 | [0.95, 1.94] |
| q3 | 1.18 | [0.89, 1.55] |
| q4 | 1.46 | [1.01, 2.11] |
| q5 | 1.13 | [0.84, 1.53] |

```

s1 <- DID_RR_vectors(woolsey_evac_outpatient)
s2 <- DID_RR_vectors(woolsey_evac_inpatient)
s3 <- DID_RR_vectors(woolsey_evac_ED)
s4 <- DID_RR_vectors(woolsey_evac_inpatient_cardioresp)
s5 <- DID_RR_vectors(woolsey_evac_ED_cardioresp)

woolsey_fire_evac <- rbind(s1, s2, s3, s4, s5)
knitr::kable(woolsey_fire_evac)

```

| | | |
|----|------|--------------|
| s1 | 0.86 | [0.72, 1.02] |
| s2 | 1.50 | [0.89, 2.54] |
| s3 | 1.22 | [0.81, 1.84] |
| s4 | 1.68 | [0.99, 2.87] |
| s5 | 1.18 | [0.76, 1.85] |

```
t1 <- DID_RR_vectors(woolsey_fire_outpatient)
t2 <- DID_RR_vectors(woolsey_fire_inpatient)
t3 <- DID_RR_vectors(woolsey_fire_ED)
t4 <- DID_RR_vectors(woolsey_fire_inpatient_cardioresp)
t5 <- DID_RR_vectors(woolsey_fire_ED_cardioresp)
```

```
woolsey_fire_only <- rbind(t1, t2, t3, t4, t5)
knitr::kable(woolsey_fire_only)
```

| | | |
|----|------|--------------|
| t1 | 0.88 | [0.78, 0.98] |
| t2 | 1.36 | [0.95, 1.94] |
| t3 | 1.18 | [0.89, 1.55] |
| t4 | 1.46 | [1.01, 2.11] |
| t5 | 1.13 | [0.84, 1.53] |

getty tables

```
u1 <- DID_RR_vectors(getty_both_outpatient)
u2 <- DID_RR_vectors(getty_both_inpatient)
u3 <- DID_RR_vectors(getty_both_ED)
u4 <- DID_RR_vectors(getty_both_inpatient_cardioresp)
u5 <- DID_RR_vectors(getty_both_ED_cardioresp)
```

```
getty_fire_both <- rbind(u1, u2, u3, u4, u5)
knitr::kable(getty_fire_both)
```

| | | |
|----|------|--------------|
| u1 | 0.97 | [0.88, 1.07] |
| u2 | 0.77 | [0.51, 1.17] |
| u3 | 0.90 | [0.69, 1.17] |
| u4 | 0.81 | [0.53, 1.24] |
| u5 | 0.85 | [0.63, 1.14] |

```
v1 <- DID_RR_vectors(getty_evac_outpatient)
v2 <- DID_RR_vectors(getty_evac_inpatient)
v3 <- DID_RR_vectors(getty_evac_ED)
v4 <- DID_RR_vectors(getty_evac_inpatient_cardioresp)
v5 <- DID_RR_vectors(getty_evac_ED_cardioresp)
```

```
getty_fire_evac <- rbind(v1, v2, v3, v4, v5)
knitr::kable(getty_fire_evac)
```

| | | |
|----|------|--------------|
| v1 | 0.85 | [0.67, 1.08] |
|----|------|--------------|

| | | |
|----|------|--------------|
| v2 | 0.17 | [0.02, 1.36] |
| v3 | 0.61 | [0.29, 1.32] |
| v4 | 0.18 | [0.02, 1.50] |
| v5 | 0.60 | [0.25, 1.44] |

```
w1 <- DID_RR_vectors(getty_fire_outpatient)
w2 <- DID_RR_vectors(getty_fire_inpatient)
w3 <- DID_RR_vectors(getty_fire_ED)
w4 <- DID_RR_vectors(getty_fire_inpatient_cardioresp)
w5 <- DID_RR_vectors(getty_fire_ED_cardioresp)

getty_fire_only <- rbind(w1, w2, w3, w4, w5)
knitr::kable(getty_fire_only)
```

| | | |
|----|------|--------------|
| w1 | 0.97 | [0.88, 1.07] |
| w2 | 0.77 | [0.51, 1.17] |
| w3 | 0.90 | [0.69, 1.17] |
| w4 | 0.81 | [0.53, 1.24] |
| w5 | 0.85 | [0.63, 1.14] |

```
add_case_name <- function(fire_dataframe, casename){
  fire_dataframe <- fire_dataframe %>%
    mutate(Exposure = paste0(casename))
  return(fire_dataframe)
}

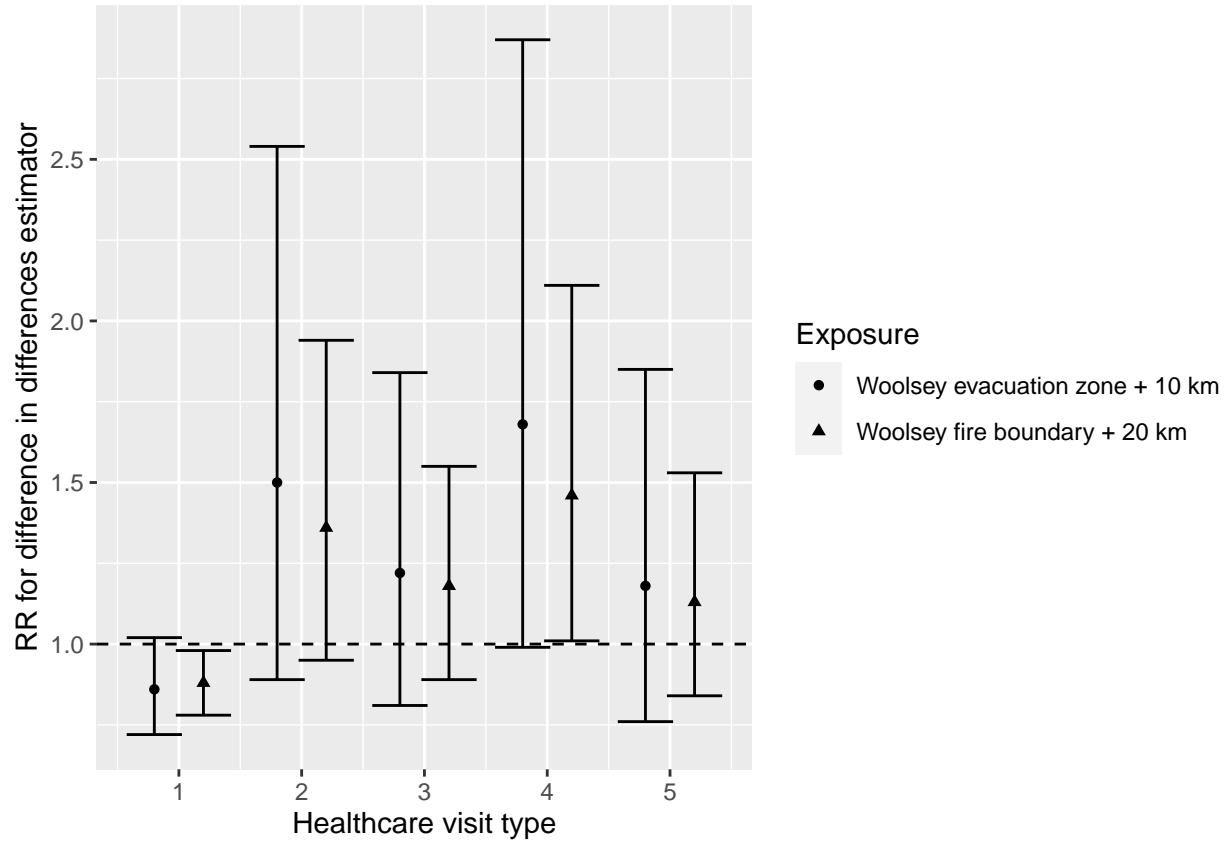
woolsey_fire_evac <-
  add_case_name(as.data.frame(woolsey_fire_evac), 'Woolsey evacuation zone + 10 km')
woolsey_fire_only <-
  add_case_name(as.data.frame(woolsey_fire_only), 'Woolsey fire boundary + 20 km')
getty_fire_evac <-
  add_case_name(as.data.frame(getty_fire_evac), 'Getty evacuation zone + 10 km')
getty_fire_only <-
  add_case_name(as.data.frame(getty_fire_only), 'Getty fire boundary + 20 km')

# create plot Joan wanted.
all_fires <- rbind(woolsey_fire_evac,
  woolsey_fire_only,
  getty_fire_evac,
  getty_fire_only)
all_fires <- all_fires %>% mutate(RR = as.numeric(substr(V1, start = 1, stop = 4)),
  lw = as.numeric(substr(V1, start = 7, stop = 10)),
  up = as.numeric(substr(V1, start = 13, stop = 16)))
all_fires <- all_fires %>% group_by(Exposure) %>% mutate(visit_type = row_number())
```

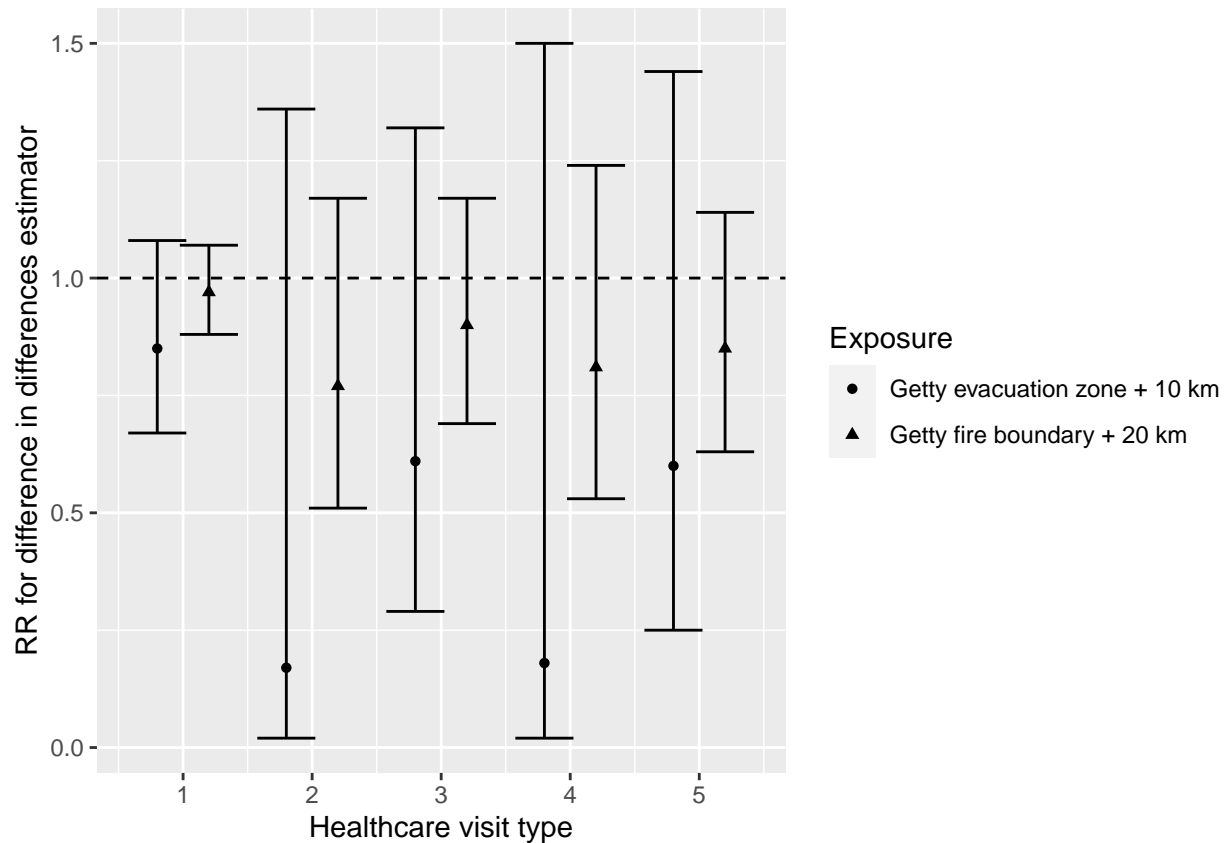
```
woolsey <- all_fires[1:10,]
pd <- position_dodge(0.8)
woolsey %>% ggplot(aes(x = visit_type, y = RR,
  shape = Exposure)) + geom_point(position = pd) +
```



```
geom_errorbar(aes(ymin = lw, ymax = up), position = pd) +
ylab("RR for difference in differences estimator") +
xlab("Healthcare visit type") +
geom_hline(aes(yintercept = 1), linetype = 'dashed')
```



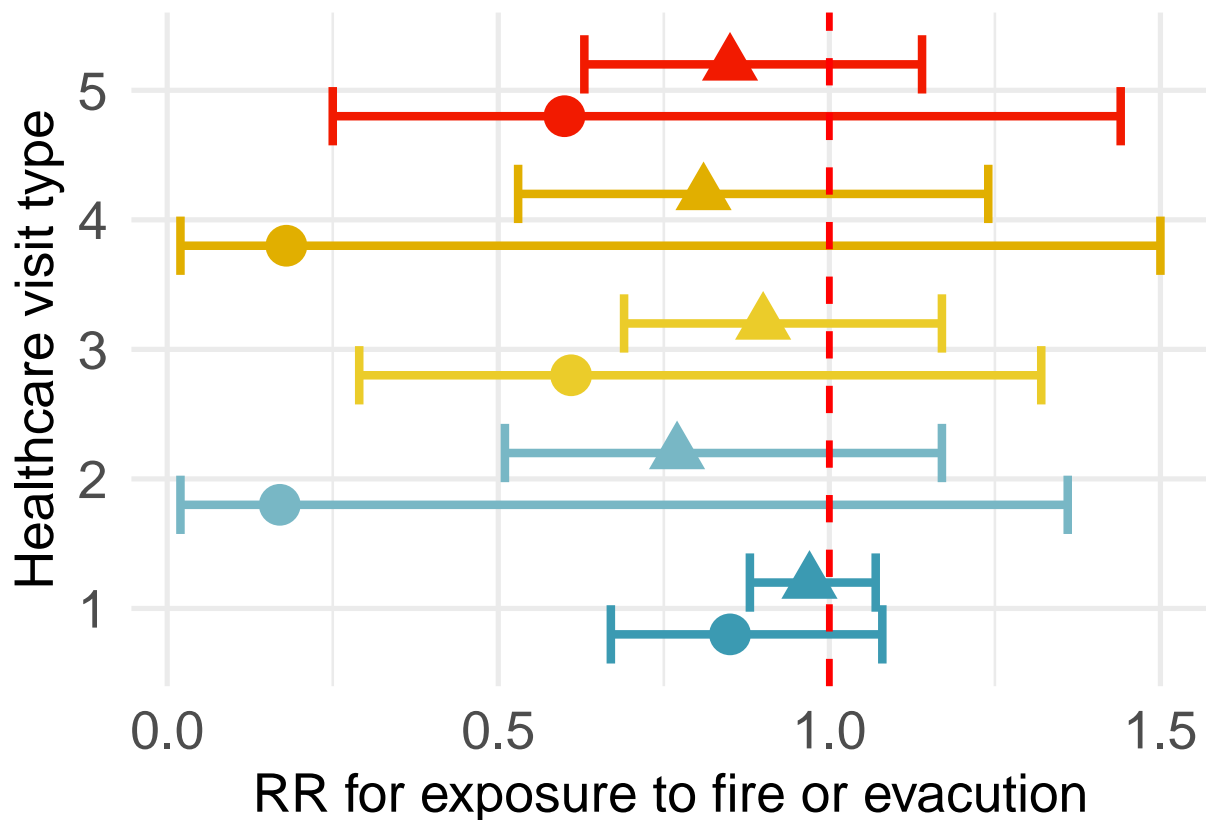
```
getty <- all_fires[11:20,]
pd <- position_dodge(0.8)
getty %>% ggplot(aes(x = visit_type, y = RR,
                     shape = Exposure)) + geom_point(position = pd) +
geom_errorbar(aes(ymin = lw, ymax = up), position = pd) +
ylab("RR for difference in differences estimator") +
xlab("Healthcare visit type") +
geom_hline(aes(yintercept = 1), linetype = 'dashed')
```



```

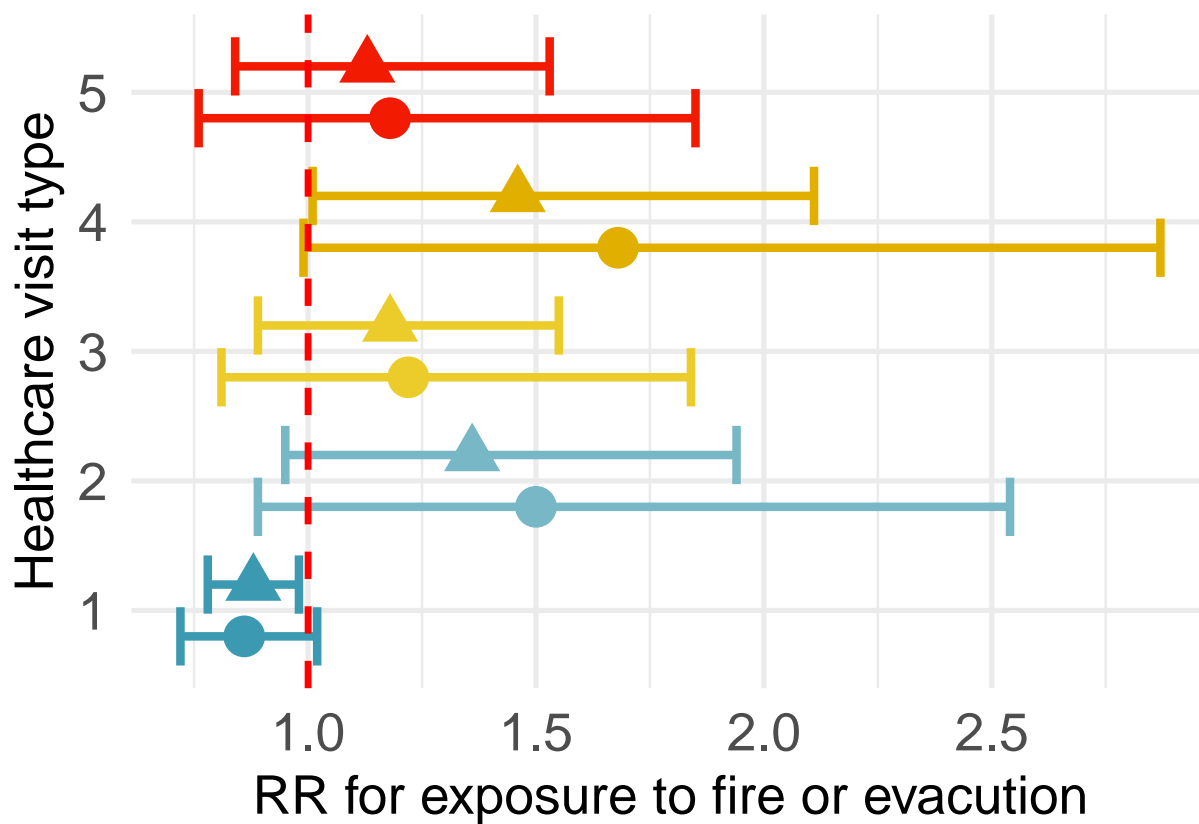
getty <- all_fires[11:20,] %>% mutate(visit_type = as.factor(visit_type))
pd <- position_dodge(0.8)
getty %>% ggplot(aes(x = RR, y = visit_type,
                    shape = Exposure, color = visit_type)) +
  geom_point(position = ggstance::position_dodgev(0.8), size = 7, aes(color = visit_type)) +
  geom_errorbar(aes(xmin = lw, xmax = up), position = ggstance::position_dodgev(0.8),
               size = 1.5) +
  xlab("RR for exposure to fire or evacuation") +
  ylab("Healthcare visit type") +
  geom_vline(aes(xintercept = 1), linetype = 'dashed', color = 'red', size = 1.2) +
  theme_minimal(base_size = 20) +
  theme(axis.text.x = element_text(size = 20),
        axis.text.y = element_text(size = 20)) +
  #scale_color_viridis(discrete = TRUE, option = "B") +
  scale_color_manual(values = wes_palette("Zissou1", 5, type = c("discrete")))) +
  theme(legend.position = 'none')

```



```
ggsave(filename = here("writing", "figures", "automated_results_tables", "getty_fire_RR_plot.pdf"), width = 10, height = 10)
```

```
woolsey <- all_fires[1:10,] %>% mutate(visit_type = as.factor(visit_type))
pd <- position_dodge(0.8)
woolsey %>% ggplot(aes(x = RR, y = visit_type,
                      shape = Exposure, color = visit_type)) +
  geom_point(position = ggstance::position_dodgev(0.8), size = 7, aes(color = visit_type)) +
  geom_errorbar(aes(xmin = lw, xmax = up), position = ggstance::position_dodgev(0.8),
               size = 1.5) +
  xlab("RR for exposure to fire or evacuation") +
  ylab("Healthcare visit type") +
  geom_vline(aes(xintercept = 1), linetype = 'dashed', color = 'red', size = 1.2) +
  theme_minimal(base_size = 20) +
  theme(axis.text.x = element_text(size = 20),
        axis.text.y = element_text(size = 20)) +
  #scale_color_viridis(discrete = TRUE, option = "B") +
  scale_color_manual(values = wes_palette("Zissou1", 5, type = c("discrete"))) +
  theme(legend.position = 'none')
```



```
ggsave(filename = here("writing", "figures", "automated_results_tables", "woolsey_fire_RR_plot.pdf"), w
```