

minipaper2-opendatatoronto

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Figure 1

```
library(dplyr)
library(knitr)
library(opendatatoronto)
library(tidyverse)
library(purrr)
library(ggplot2)
packages <- list_packages(limit = 10)

ttc_packages <- search_packages("ttc")

ttc_delay_packages <- search_packages("TTC Subway Delay")

ttc_delay_resources <- ttc_delay_packages %>%
  list_package_resources()

ttc_delay_statistics <- ttc_delay_resources %>%
```

Table 1: Gender Distribution by Year

year_of_death	Female	Male	Unknown	Sum
2017	25	75	0	100
2018	21	73	0	94
2019	34	92	1	127
2020	28	115	0	143
2021	50	161	6	217
2022	39	146	4	189
2023	9	69	1	79
Total	206	731	12	949

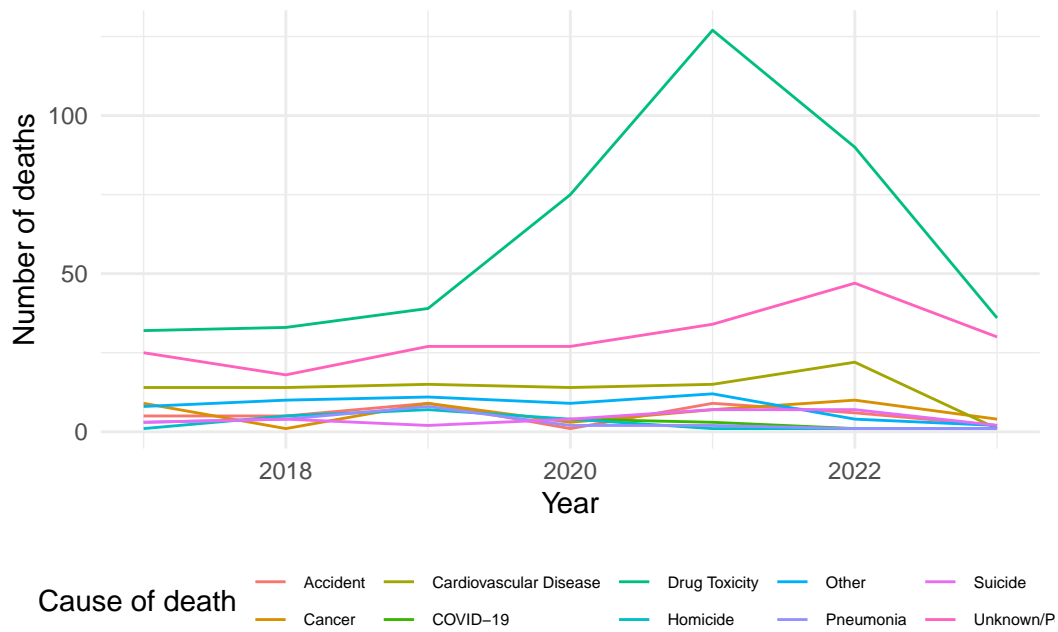


Figure 1: Trend of causes of death from 2017 to 2023

```
slice(5) %>%
get_resource()

ttc_tibble <- map_dfr(ttc_delay_statistics, ~tibble(
  station = .x$Station,
  code = .x$Code,
  min_delay = .x$`Min Delay`
))

ttc_tibble
```

```
# A tibble: 20,737 x 3
  station      code min_delay
  <chr>      <chr>    <dbl>
1 SHEPPARD WEST STATION MUATC      10
2 DUNDAS STATION      MUNCA       0
3 MUSEUM STATION      MUSC        0
4 BAY LOWER          EUOE        0
5 MUSEUM STATION      MUO         6
6 BLOOR DANFORTH SUBWAY MUGD        0
7 KIPPLING STATION    MUSAN        3
```

```

8 UNION STATION      MUIS      0
9 COLLEGE STATION    SUDP      7
10 KIPLING STATION    SUDP      0
# i 20,727 more rows

```

```
ttc_tibble%>%filter(min_delay > 0)
```

```

# A tibble: 7,168 x 3
  station      code min_delay
  <chr>      <chr>    <dbl>
1 SHEPPARD WEST STATION MUATC      10
2 MUSEUM STATION      MUO         6
3 KIPLING STATION      MUSAN        3
4 COLLEGE STATION      SUDP         7
5 WARDEN STATION       MUI         3
6 DONLANDS STATION     TUNOA        4
7 KEELE STATION        TUNOA        4
8 DONLANDS STATION     TUNOA        4
9 KENNEDY SRT STATION  ERTC         7
10 VICTORIA PARK STATION EUDO         6
# i 7,158 more rows

```

```

station_delays <- ttc_tibble%>%
  group_by(code) %>%
  summarise(Delay_Count = n())%>%
  ungroup() %>%
  top_n(10, Delay_Count) %>%
  arrange(Delay_Count)

# Plot the histogram
ggplot(station_delays, aes(x = reorder(code, Delay_Count), y = Delay_Count)) +
  geom_col() +
  theme(axis.text.x = element_text(angle = 90, hjust = 1)) +
  labs(title = "Number of Delays per Station", x = "Station", y = "Number of Delays")

```

