

Lighthouse Labs DS

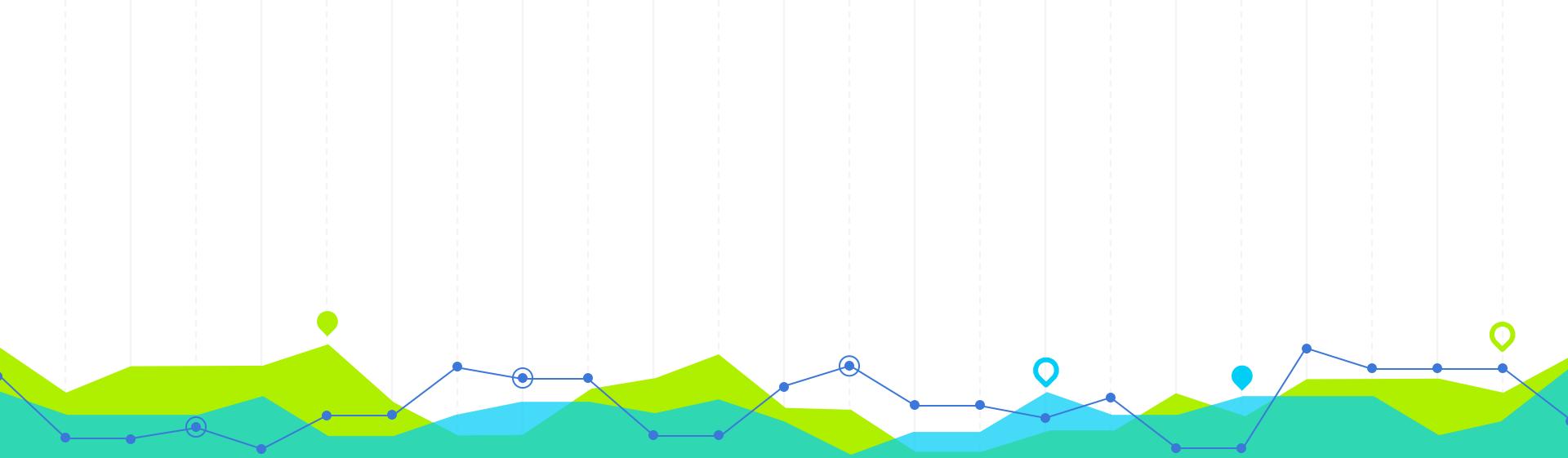
PROJECT:03

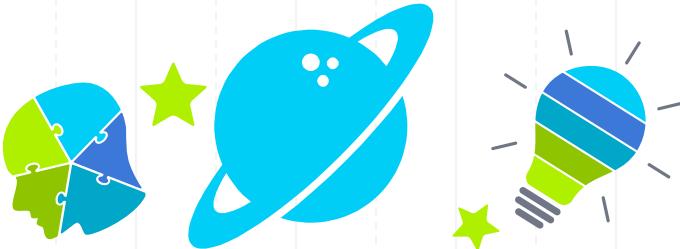
Data Visualisation and Dashboards with Tableau

By Jamie Dormaar. Dec 12th, 2022



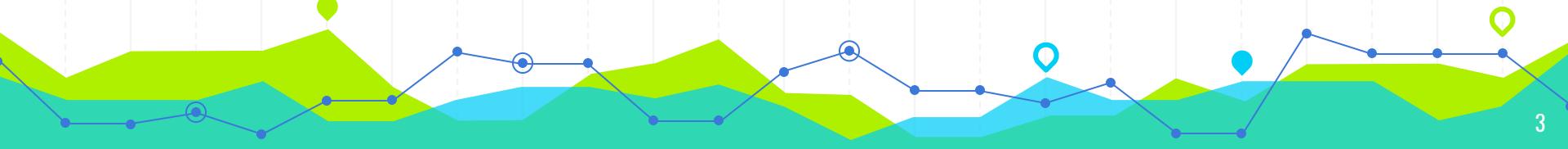
OPTION 2: CAUSE OF DEATH – OUR WORLD IN DATA





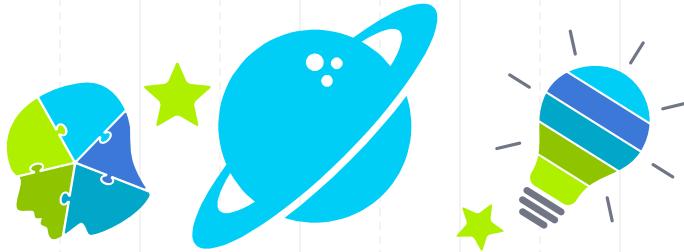
THE PLANET'S SURVIVAL PLAN!!

Analyze global mortality, and by extension master it's survival success patterns!



Our World
in Data

<https://ourworldindata.org>



ETL

HOW ARE THE GLOBAL MORTALITIES DISTRIBUTED DIFFERENTLY AMONGST VARIOUS AGE GROUPS?

Breakdown of deaths by age



Exploratory Data Analysis (EDA)

Load and explore the data for Tableau readiness.

TABLE OF CONTENT

- TABLE 1 - Summary
- TABLE 2 - Global Totals
- TABLE 3 - Age Groups
- TABLE 4 - Ages 0-4
- TABLE 5 - Ages 5-14
- TABLE 6 - Ages 15-49
- TABLE 7 - Ages 50-69
- TABLE 8 - Ages 70+
- TABLE 9 - Risks

Pandas in python: Explore & Transform

TABLE 1 Summary:

```
summary_df = pd.read_csv('../data/WHO_COD_V2.0.csv')  
summary_df.head()
```

Python

	Causes name	Causes Full Description	Death Numbers	Entity	Code	Year
0	Meningitis	Deaths - Meningitis - Sex: Both - Age: All Ages...	2933.0	Afghanistan	AFG	2007
1	Neoplasms	Deaths - Neoplasms - Sex: Both - Age: All Ages...	15925.0	Afghanistan	AFG	2007
2	Fire, heat, and hot substances	Deaths - Fire, heat, and hot substances - Sex: ...	481.0	Afghanistan	AFG	2007
3	Malaria	Deaths - Malaria - Sex: Both - Age: All Ages ...	393.0	Afghanistan	AFG	2007
4	Drowning	Deaths - Drowning - Sex: Both - Age: All Ages ...	2127.0	Afghanistan	AFG	2007

ETL

T1 Summary+

Connection



Live



Extract

Filters

0 | Add

LOAD Tables into Tableau:

T1 Summary.csv

T2 Globe Totals.csv

T3 Age Groups.csv

T9 Risks.csv1

T4 Ages 0-4.csv

T9 Risks.csv

T5 Ages 5-14.csv

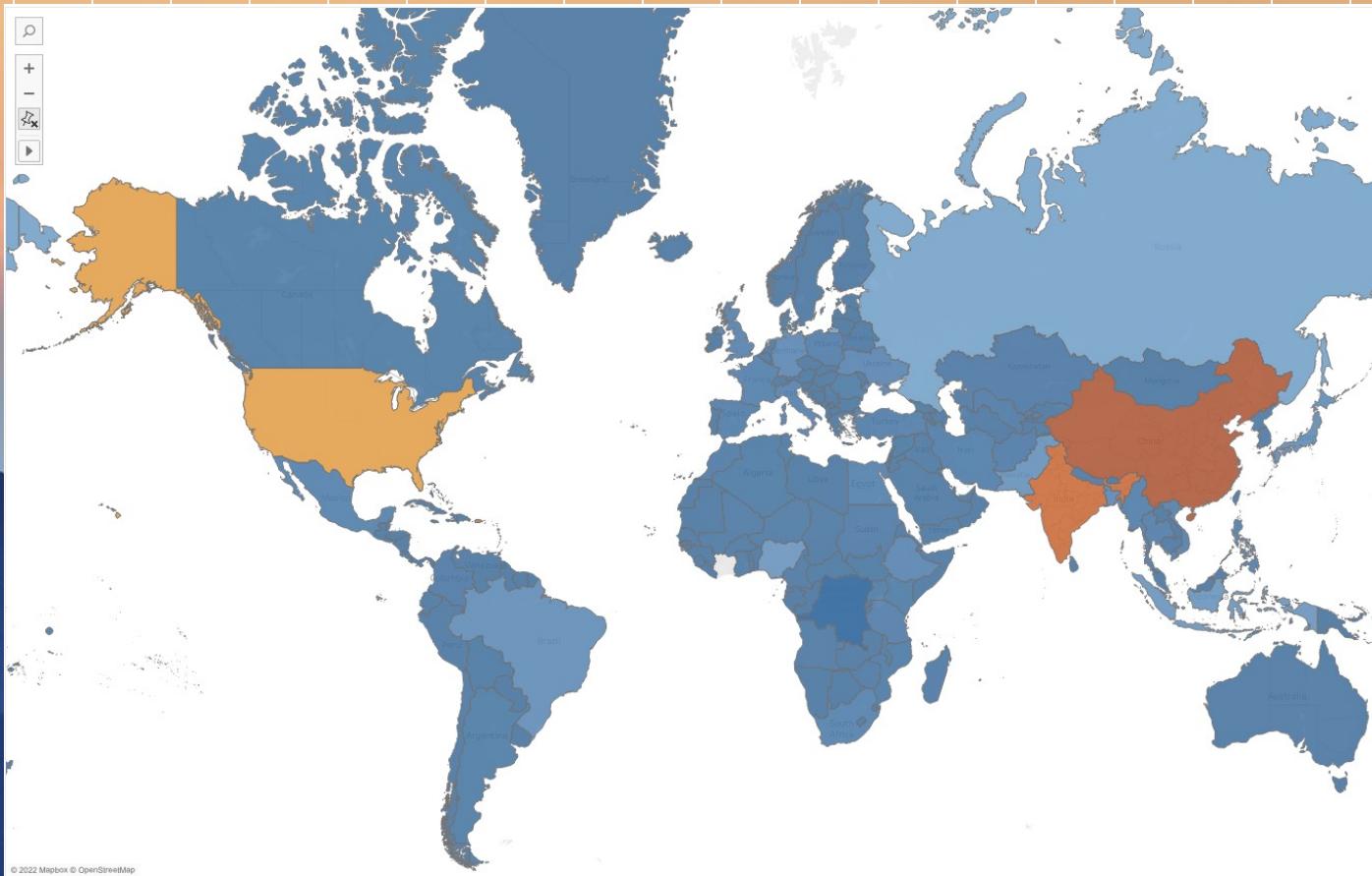
T6 Ages 15-49.csv

T7 Ages 50-69.csv

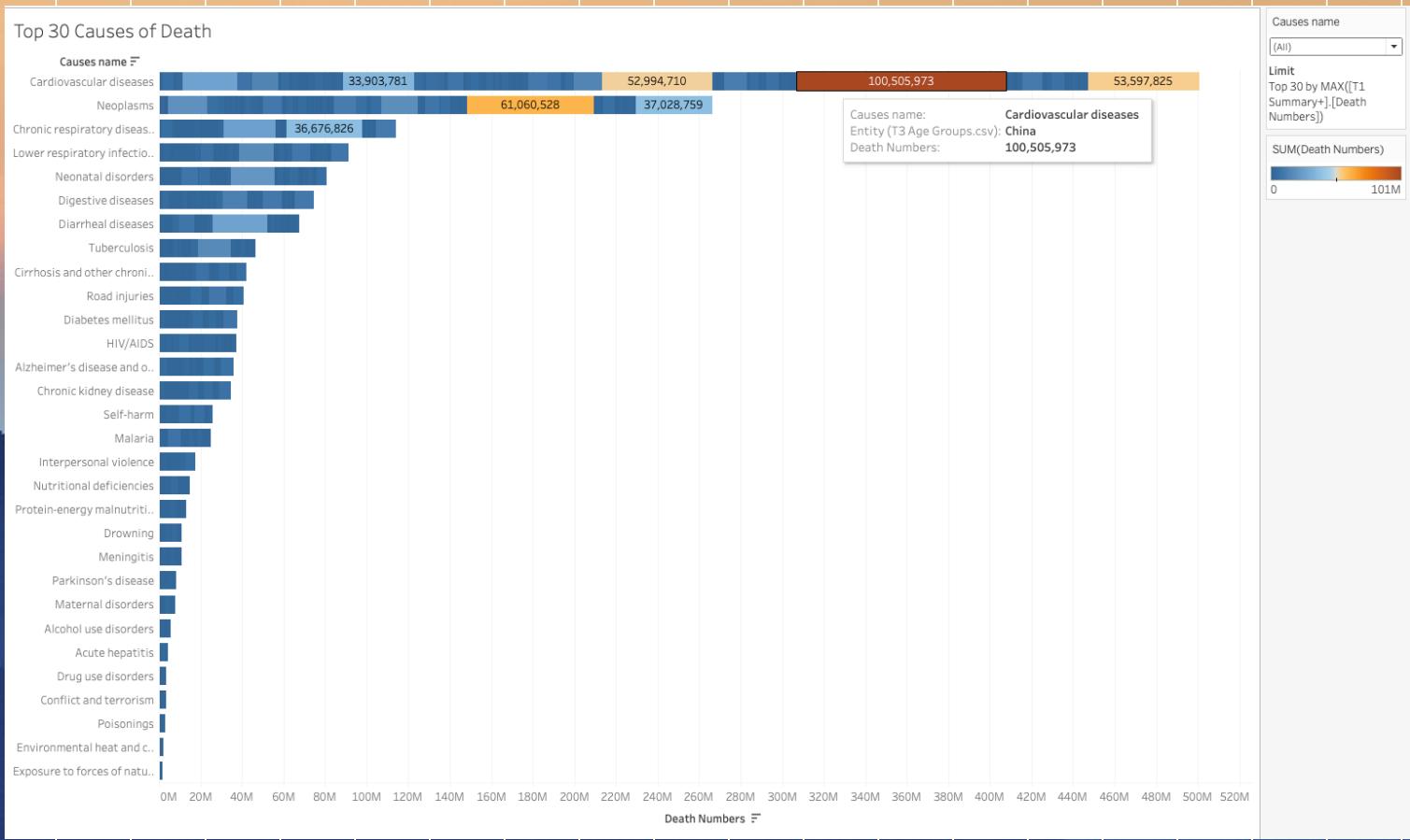
T8 Ages 70+.csv



World map, with country and causes of death interactivity

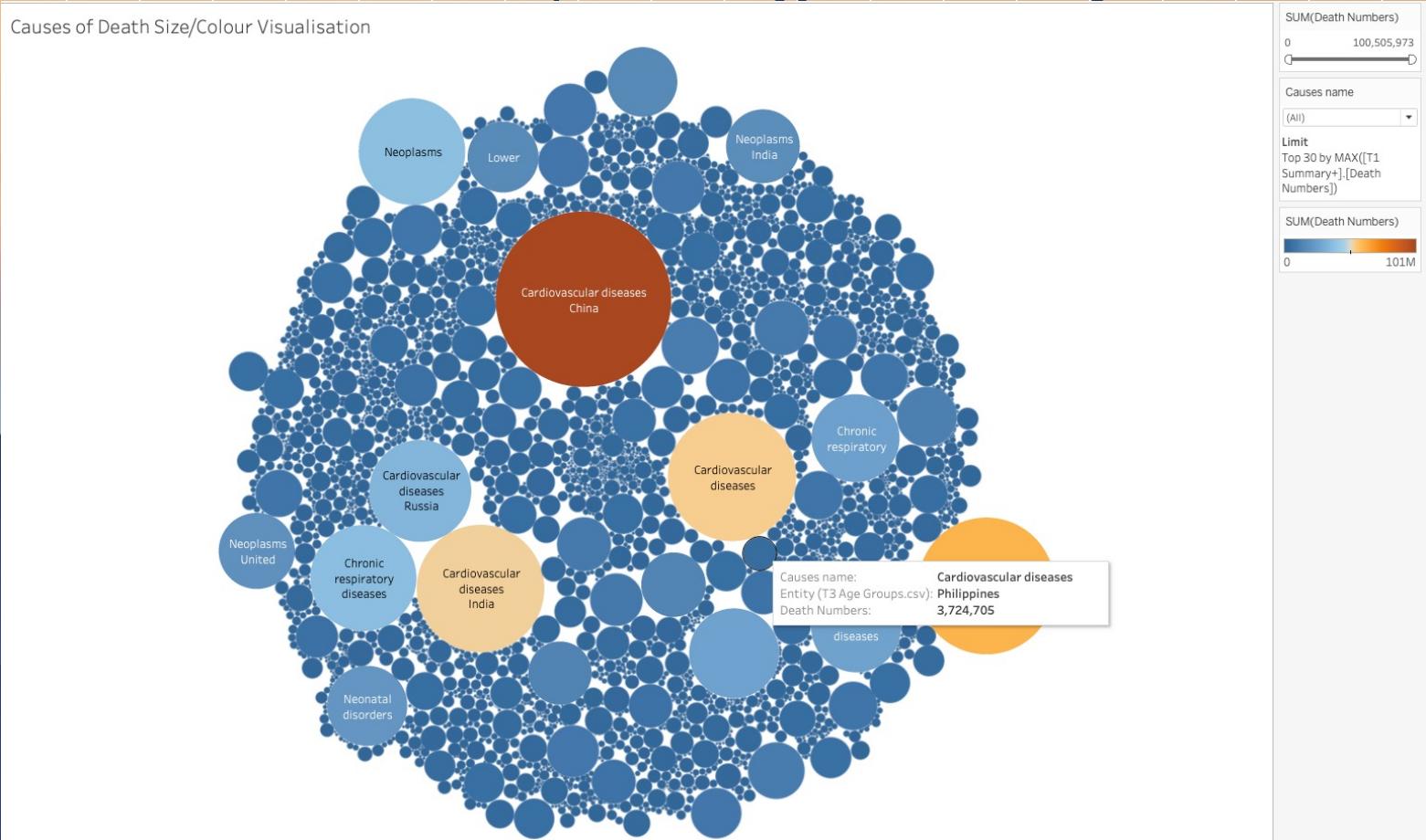


Stacked Bar Chart, filtering for the top 30 causes



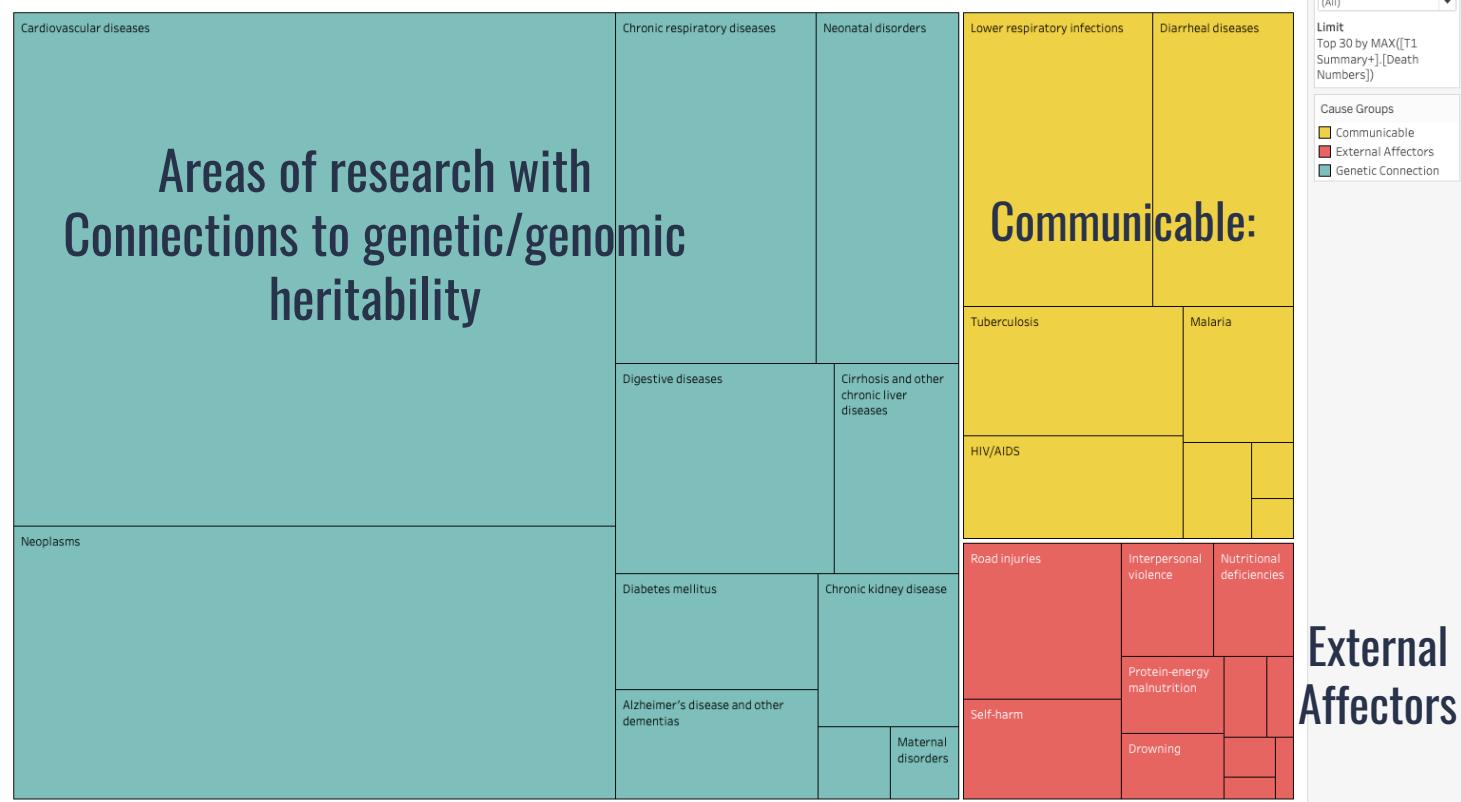
Stacked Bar Chart, filtering for the top 30 causes

Causes of Death Size/Colour Visualisation

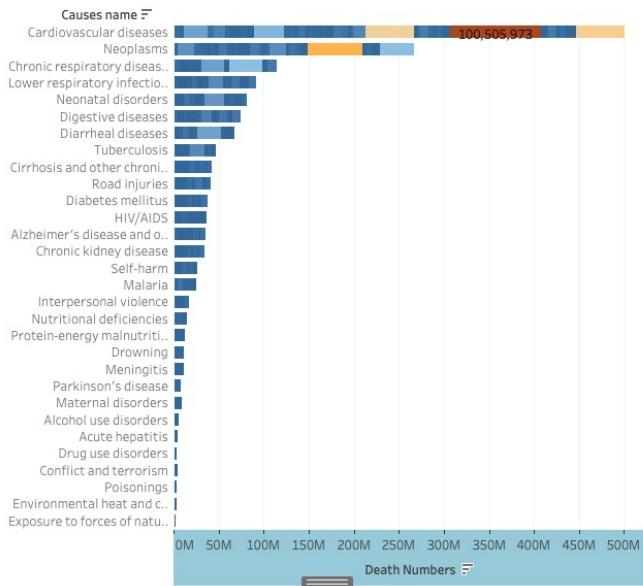


TreeMap: Also filtering for the top 30 causes

Grouped TreeMap Cause/Country



Top 30 Causes of Death



Deaths by Country Filter by Year



Causes name

(All)

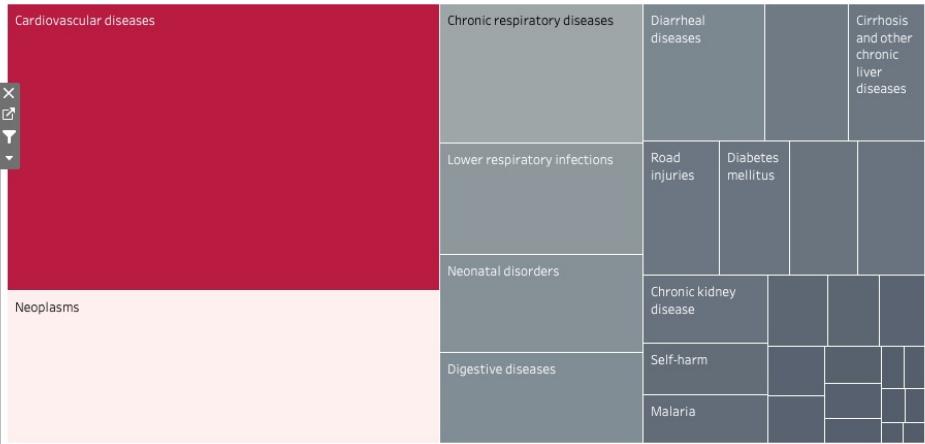
Limit
Top 30 by MAX([T1
Summary+].[Death
Numbers])

Year
(All)

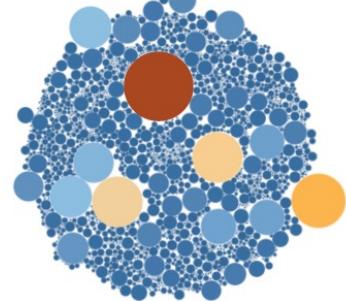
Death Numbers
302 265M

Death Numbers
0 100,505,973

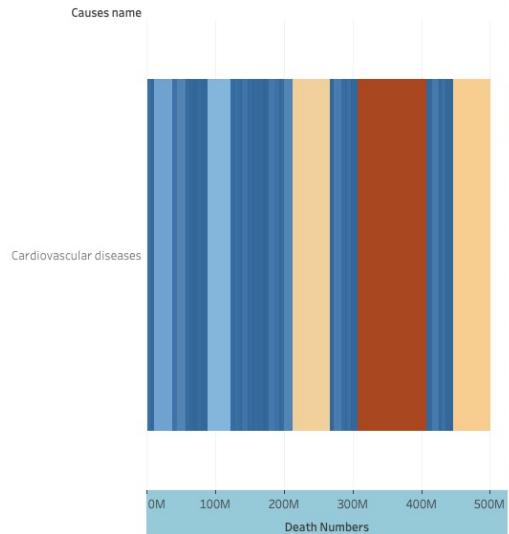
TreeMap Cause/Country



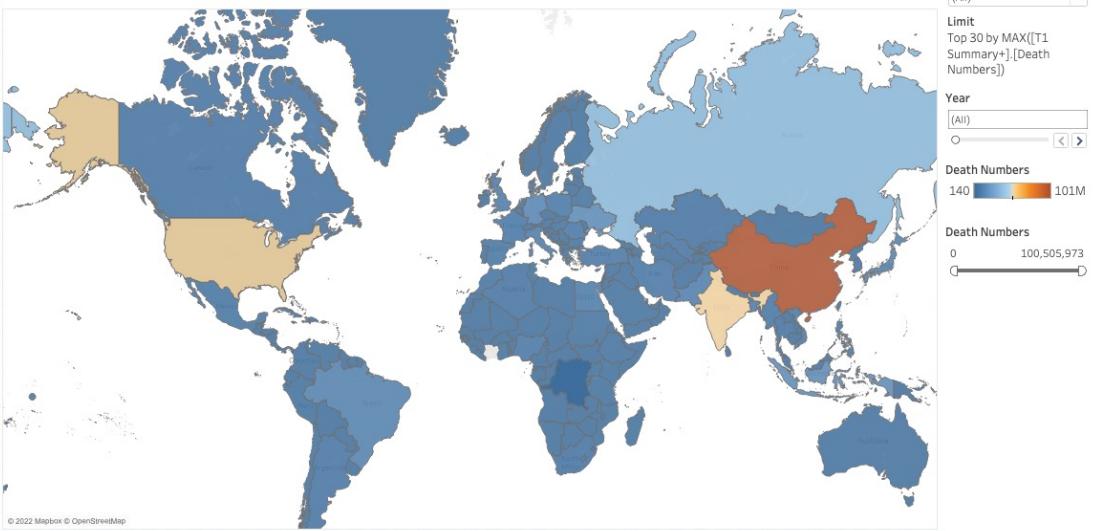
Causes of Death Size/Colour Visualisation



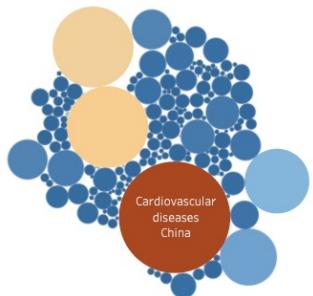
Top 30 Causes of Death



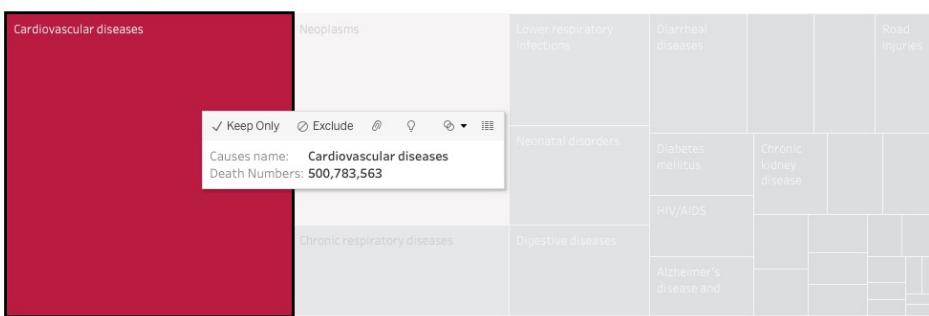
Deaths by Country Filter by Year



Causes of Death Size/Colour Visualisation



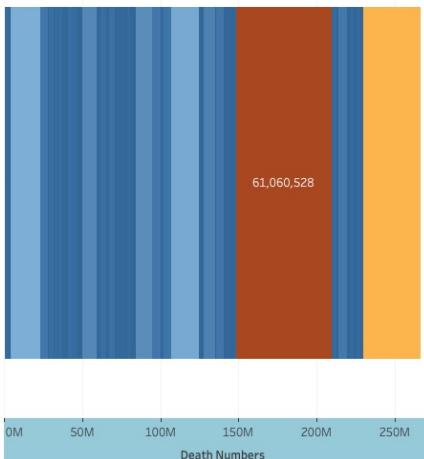
TreeMap Cause/Country



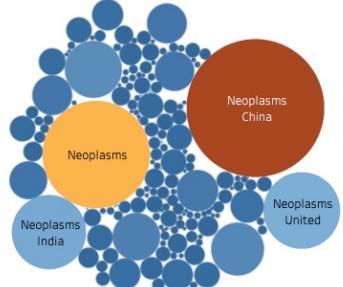
Top 30 Causes of Death

Top 30 Causes of Death

Causes name



Causes of Death Size/Colour Visualisation



Deaths by Country Filter by Year

Deaths by Country Filter by Year

Causes name

(All)

Limit
Top 30 by MAX([T1
Summary+].[Death
Numbers])

Year

(All)

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Death Numbers

49

61,060,528

Death Numbers

0

100,505,973

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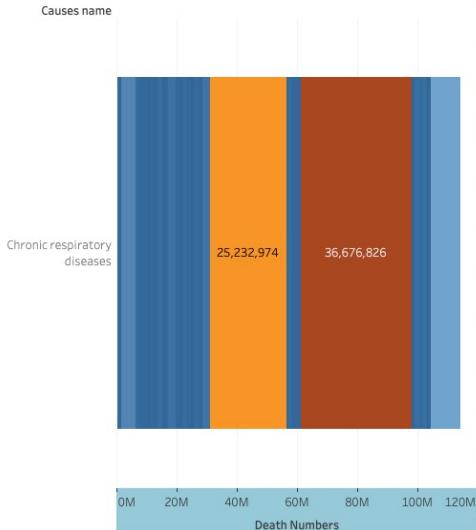
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Top 20 Causes of Death

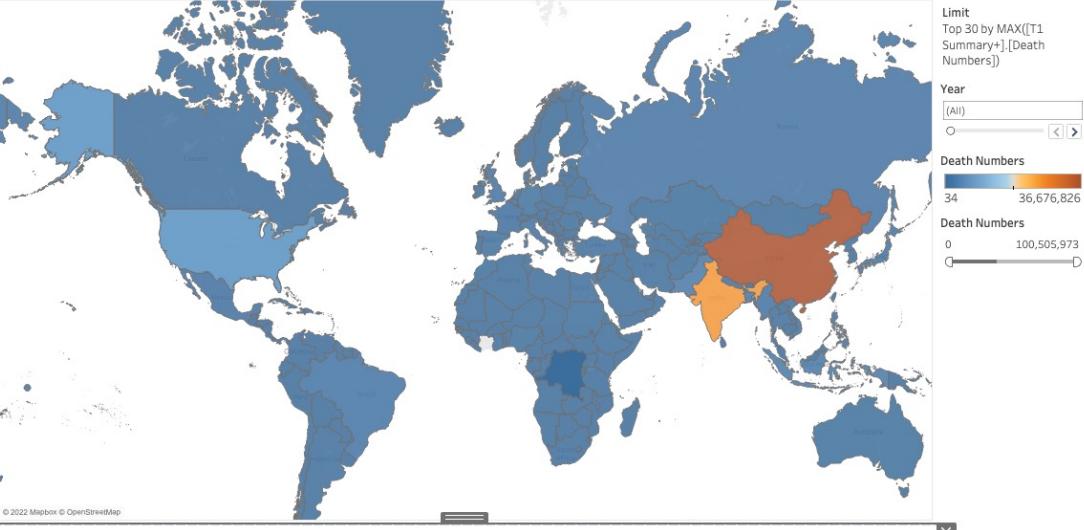
Top 30 Causes of Death

Causes Top 30 Causes of Death



Deaths by Country Filter by Year

Deaths by Country Filter by Year



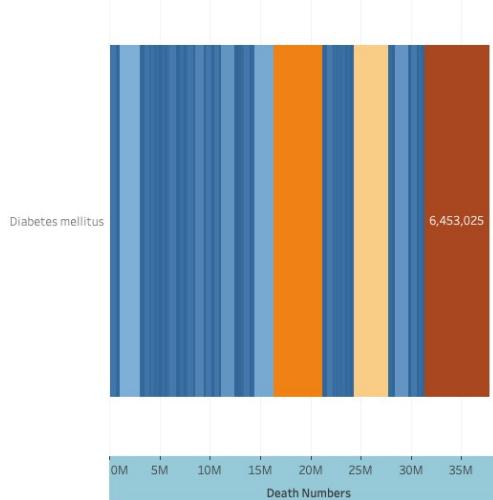
Top 20 Causes of Death

Top 20 Causes of Death

Causes Top 30 Causes of Death

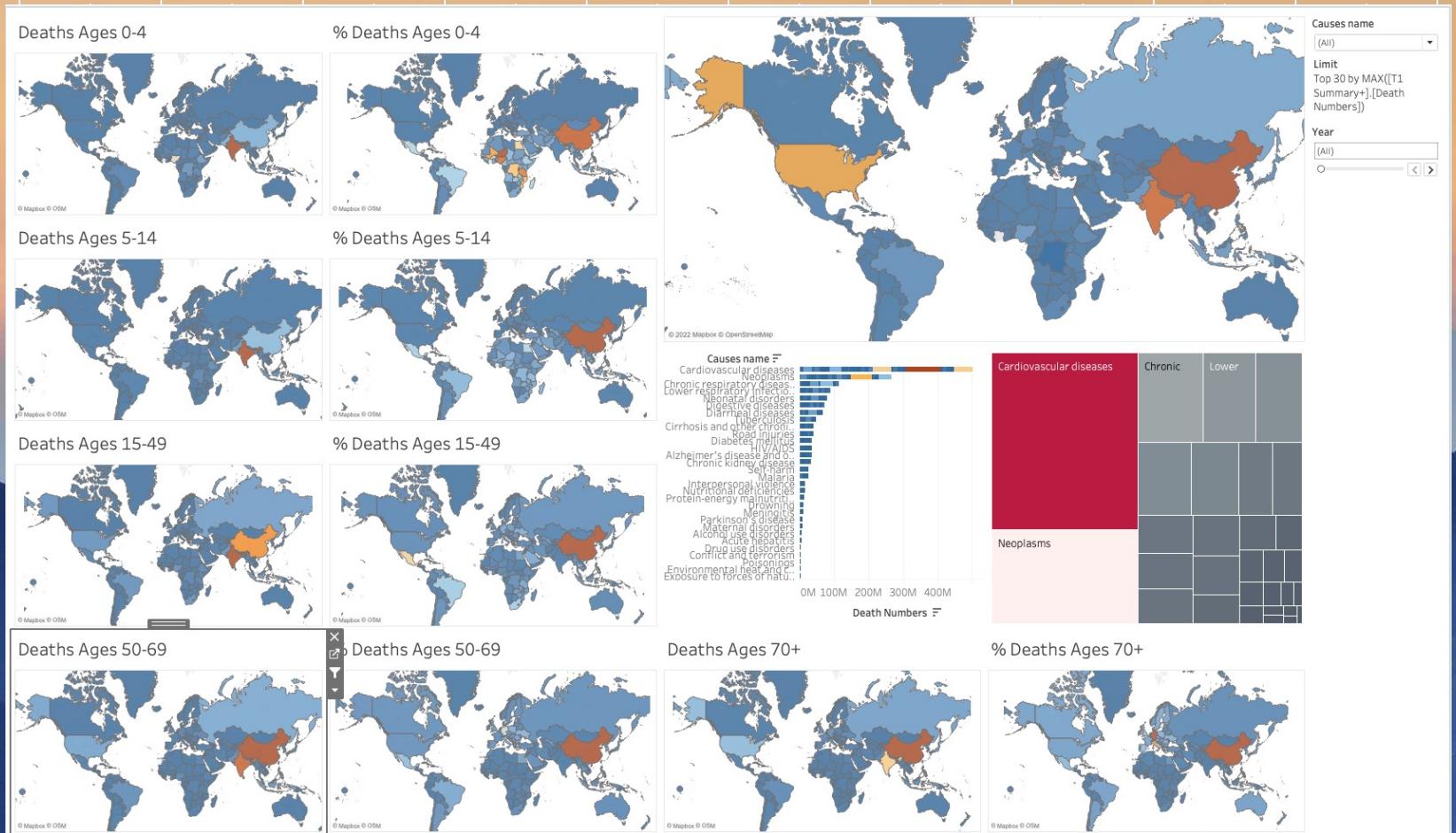
Top 30 Causes of Death

Causes name

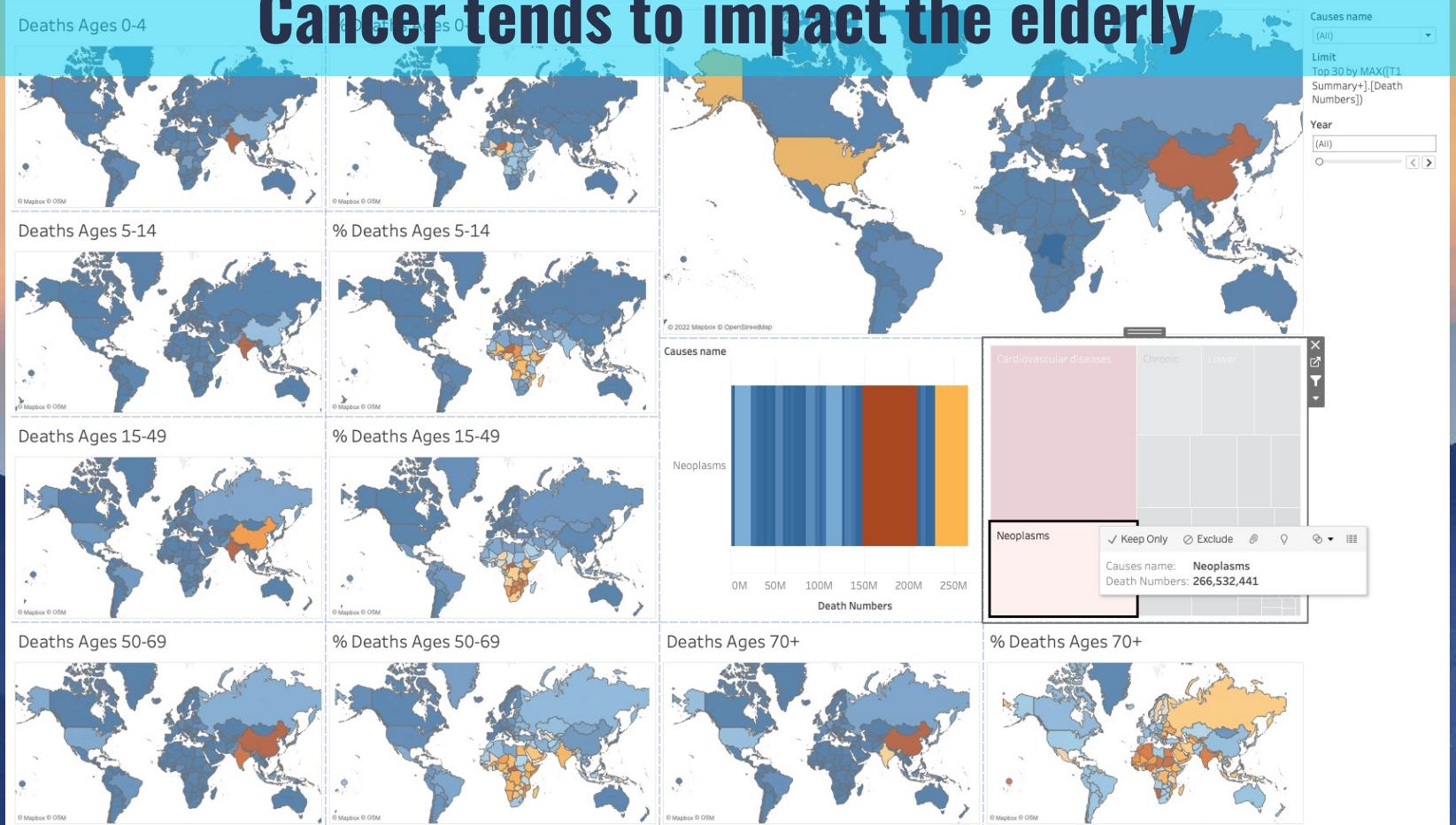


Deaths by Country Filter by Year

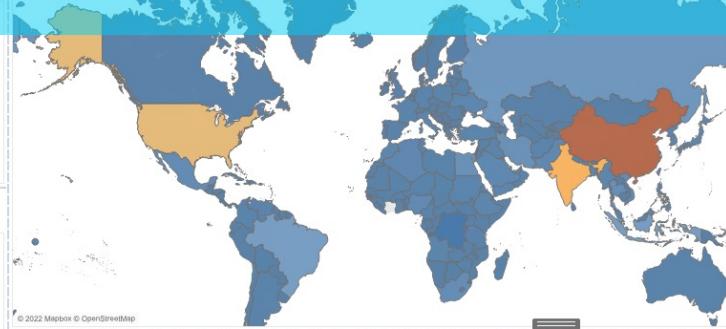
Causes name



Cancer tends to impact the elderly



Road Injuries in Greenland! Who knew!!?



Causes name
(All)

Limit
Top 30 by MAX([T1])

Summary+,[Death
Numbers])

Year
(All)

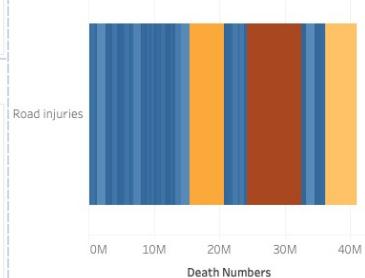
Deaths Ages 5-14



% Deaths Ages 5-14



Causes name



Cardiovascular diseases

Chronic Lower

Neoplasms

✓ Keep Only Exclude

Causes name: Road injuries
Death Numbers: 40,947,092

Deaths Ages 15-49



% Deaths Ages 15-49



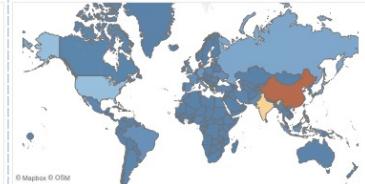
Deaths Ages 50-69



% Deaths Ages 50-69



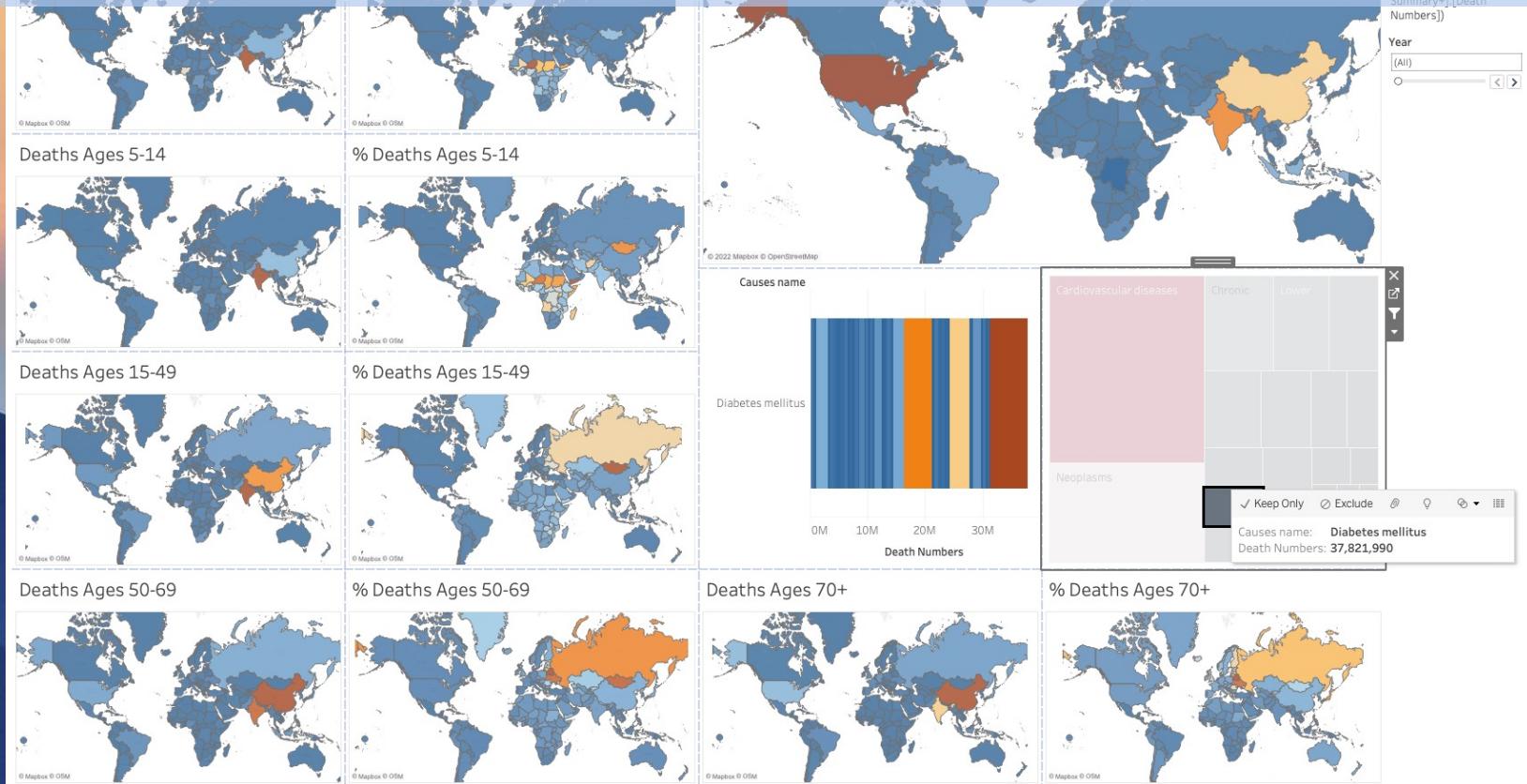
Deaths Ages 70+



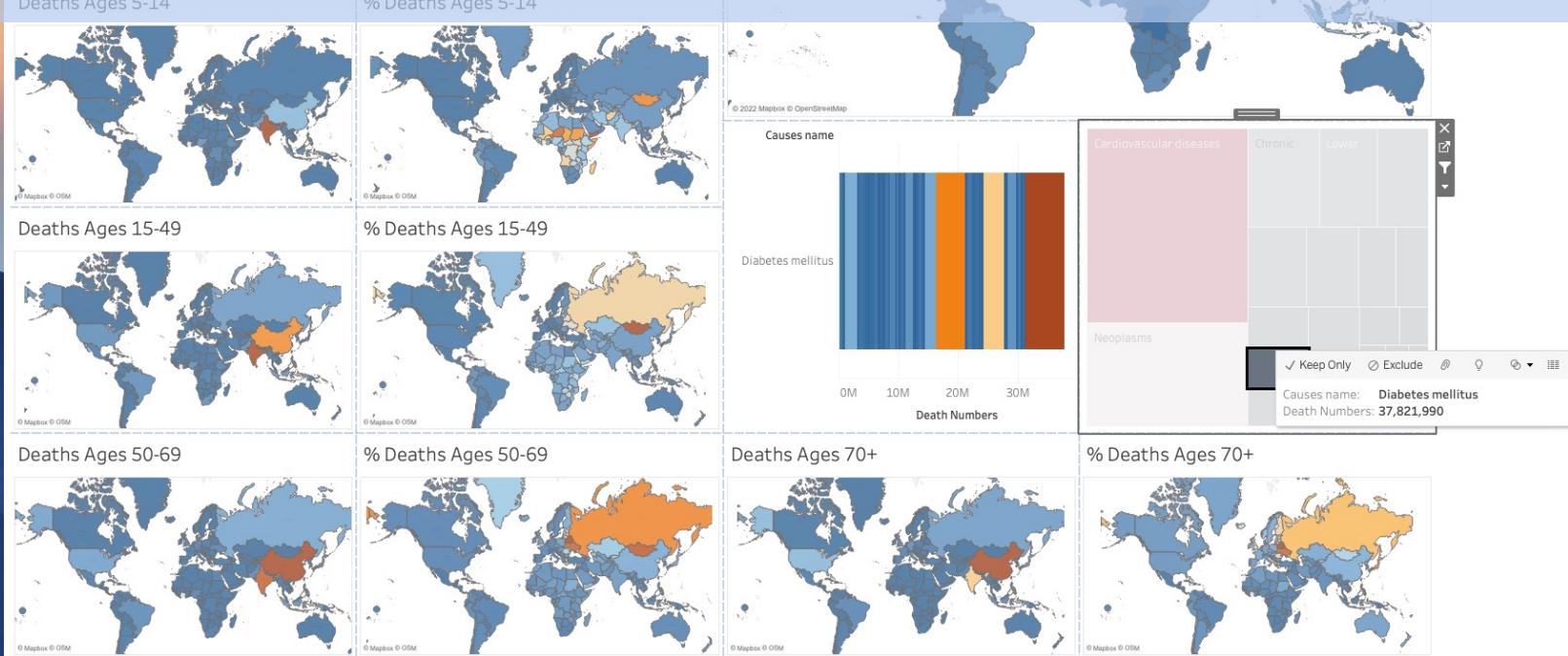
% Deaths Ages 70+

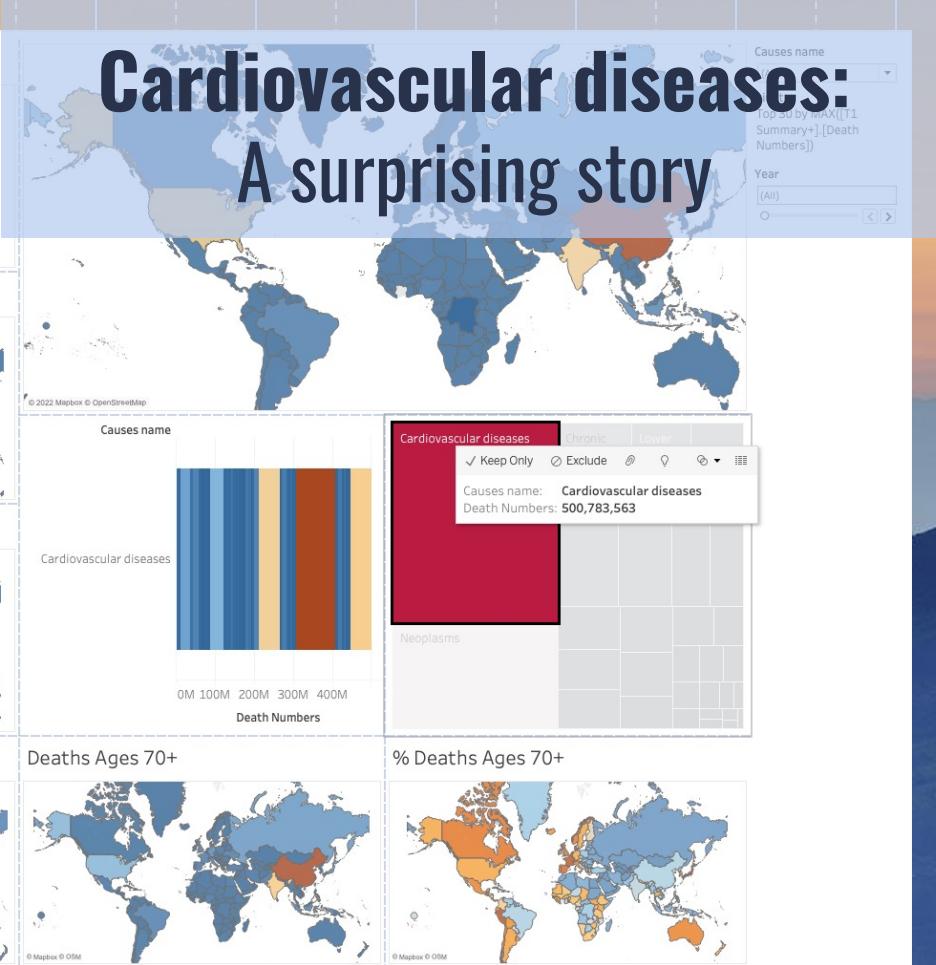
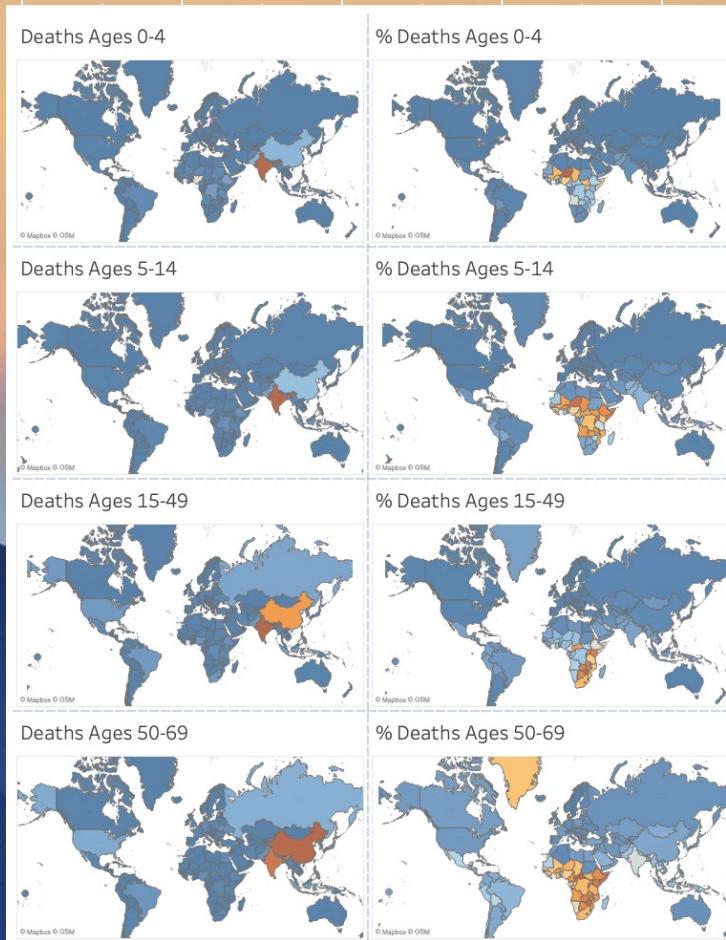


Diabetes in Russia.



Diabetes in Russia. Superior survival in the other areas of potential deathy-ness, or do they craft masterful sweets worth getting diabetes for?





“

References

1. Ivan Chavezi. "Causes of Death - Our World In Data". Retrieved from: [kaggle](#) [Online Resource]
2. Hannah Ritchie, Fiona Spooner and Max Roser (2018) - "Causes of death". Published online at [OurWorldInData.org](https://ourworldindata.org/causes-of-death). Retrieved from: '<https://ourworldindata.org/causes-of-death>' [Online Resource]
3. Naghavi, Mohsen et al. (2017) "Global, regional, and national age-sex specific mortality for 264 causes of death, 1980–2016: a systematic analysis for the Global Burden of Disease Study 2016". *The Lancet*, Volume 390, Issue 10100, 1151 - 1210.

THANKS!

Any questions?

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