

# Description of data for the comparison of COVID-19 mortality in European and North American geographic entities

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## 1 References

Méline Ribaud, Edith Gabriel, Joseph Hughes, Samuel Soubeyrand. Identifying potential significant factors impacting zero-inflated proportions data. 2021. <hal-02936779v3> <https://hal.archives-ouvertes.fr/hal-02936779v3>

Soubeyrand S., Ribaud M., Baudrot V., Allard D., Pommeret D., Roques L. (2020). COVID-19 mortality dynamics: The future modelled as a (mixture of) past(s). PLoS ONE 15(9): e0238410. <https://doi.org/10.1371/journal.pone.0238410>

## 2 Format of data and description of variables

Data are provided in two tab-delimited text files. The `rawFactors.txt` file contains raw factors for all the geographic entities (countries, states and provinces; identified by the `geographic_entity` column) considered by Ribaud et al. (2021). The `diffFactors.txt` file contains for each source-receptor pair considered by Ribaud et al. (2021), the probability that the receptor (`geographic_entity_receptor` column) follows the mortality dynamics of the source (`geographic_entity_source` column) in column `proba` (see Soubeyrand et.al., 2020 for the computation of this probability) as well as differences between the respective raw factors. The factors and the difference between factors in `rawFactors.txt` and `diffFactors.txt`, respectively, are listed in the following table.

Category	Variable	Description	Unit
Economy	gdp2019	Gross domestic product in 2019	M\$
	gdp_capita	Gross domestic product per capita in 2019	\$
	healthexp	Health expenditure	M\$
Demography	pop	Total population	units
	density	Population density	units per km <sup>2</sup>
	urbanpop	Percentage of population living in urban areas	%
	pop_female	Percentage of female	%
	pop_male	Percentage of male	%
	pop_tot_0_14	Percentage of the total population in the age group 0-14	%
	pop_tot_15_64	Percentage of the total population in the age group 15-64	%
	pop_tot_65_up	Percentage of the total population in the age group 65 or more	%
	pop_female_0_14	Percentage of the female population in the age group 0-14	%
	pop_female_15_64	Percentage of the female population in the age group 15-64	%
	pop_female_65_up	Percentage of the female population in the age group 65 or more	%
	pop_male_0_14	Percentage of the male population in the age group 0-14	%
	pop_male_15_64	Percentage of the male population in the age group 15-64	%
	pop_male_65_up	Percentage of the male population in the age group 65 or more	%
	mediange	Median age	years
	life_expectancy	Life expectancy at birth	years
Health	lung	Death rate for lung diseases per 100,000 people	units
	fertility	Average number of children per woman	units
	obesity	Percentage of obese people within the population	%
	smokers	Percentage of smokers within the population	%
Healthcare System	hospibed	Number of hospital beds per 1,000 people	units
	physicians_per_1K	Number of physicians per 1,000 people	units
	nurses_per_1K	Number of nurses per 1,000 people	units
Climate	tmin	Average minimum temperature in the first semester	°C
	tmax	Average maximum temperature in the first semester	°C
	prec	Average precipitation in the first semester	mm
	avghumidity	Average relative humidity	%