Institutional Origins of COVID-19 Public Health Protective Policy Response (PPI) Data Set

COVID-19 Policy Response Lab, 2022-3-22

MAIN DATASETS

PPI_country_m1: stores information about active national and subnational policies in each country on each day of observation, with the policy variables constructed according to the first method below and aggregated over the subnational units.

PPI_regions_ZZ_m1: stores information about active national and subnational policies in each region of country ZZ on each day of observation, with the policy variables constructed according to the first method below.

PPI_country_m2: stores information about active national and subnational policies in each country on each day of observation, with the policy variables constructed according to the second method below and aggregated over the subnational units.

PPI_regions_ZZ_m2: stores information about active national and subnational policies in each region of country ZZ on each day of observation, with the policy variables constructed according to the second method below.

Country-level Protective Policy Index Method 1 (PPI-M1) dataset

	Variable name	Description	Construction	Range
Case Identification variables:				
	cname	Country name		
	isocode	ISO 3166 country code		
	isoabbr	country abbreviation according to ISO 3166		
	date	date		
Protective Policy Index Method 1 (PPI-M1) calculated variables:				
	ppi.all.tot.ave	Protective Policy Index (Both levels)	Population-weighted average of region-specific values of ppi.all.tot	[0,1]
	ppi.all.nat.ave	Protective Policy Index (National)	Population-weighted average of region-specific values of ppi.all.nat	[0,1]
	ppi.all.reg.ave	Protective Policy Index (Regional)	Population-weighted average of region-specific values of ppi.all.reg	[0,1]
Borders:				
	borders.all.tot.ave	Border closures: all components (Both levels)	Population-weighted average of region-specific values of borders.all.tot	[0,1]

	borders.all.nat.ave	Border closures: all components (National)	Population-weighted average of region-specific values of borders.all.nat	[0,1]
	borders.all.reg.ave	Border closures: all components (Regional)	Population-weighted average of region-specific values of borders.all.reg	[0,1]
	borders.air_bord.tot.ave	Border closures: closure of air borders (Both levels)	Population-weighted average of region-specific values of borders.air_bord.tot	[0,1]
	borders.air_bord.nat.ave	Border closures: closure of air borders (National)	Population-weighted average of region-specific values of borders.air_bord.nat	[0,1]
	borders.air_bord.reg.ave	Border closures: closure of air borders (Regional)	Population-weighted average of region-specific values of borders.air_bord.reg	[0,1]
	borders.land_bord.tot.ave	Border closures: closure of land borders (Both levels)	Population-weighted average of region-specific values of borders.land_bord.tot	[0,1]
	borders.land_bord.nat.ave	Border closures: closure of land borders (National)	Population-weighted average of region-specific values of borders.land_bord.nat	[0,1]
	borders.land_bord.reg.ave	Border closures: closure of land borders (Regional)	Population-weighted average of region-specific values of borders.land_bord.reg	[0,1]
	borders.sea_bord.tot.ave	Border closures: closure of sea borders (Both levels)	Population-weighted average of region-specific values of borders.sea_bord.tot	[0,1]
	borders.sea_bord.nat.ave	Border closures: closure of sea borders (National)	Population-weighted average of region-specific values of borders.sea_bord.nat	[0,1]
	borders.sea_bord.reg.ave	Border closures: closure of sea borders (Regional)	Population-weighted average of region-specific values of borders.sea_bord.reg	[0,1]
State of emergency:				
	emerg.all.tot.ave	State of emergency (Both levels)	Population-weighted average of region-specific values of emerg.all.tot	[0,1]
	emerg.all.nat.ave	State of emergency (National)	Population-weighted average of region-specific values of emerg.all.nat	[0,1]
	emerg.all.reg.ave	State of emergency (Regional)	Population-weighted average of region-specific values of emerg.all.reg	[0,1]
Individual location restrictions:				
	ind_locat.all.tot.ave	Individual location: all components (Both levels)	Population-weighted average of region-specific values of ind_locat.all.tot	[0,1]
	ind_locat.all.nat.ave	Individual location: all components (National)	Population-weighted average of region-specific values of ind_locat.all.nat	[0,1]
	ind_locat.all.reg.ave	Individual location: all components (Regional)	Population-weighted average of region-specific values of ind_locat.all.reg	[0,1]
	ind_locat.ind_mob.tot.ave	Individual location: restricted individual mobility (Both levels)	Population-weighted average of region-specific values of ind_locat.ind_mob.tot	[0,1]
	ind_locat.ind_mob.nat.ave	Individual location: restricted individual mobility (National)	Population-weighted average of region-specific values of ind_locat.ind_mob.nat	[0,1]
	ind_locat.ind_mob.reg.ave	Individual location: restricted individual mobility (Regional)	Population-weighted average of region-specific values of ind_locat.ind_mob.reg	[0,1]

	ind_locat.med_stay.tot.ave	Individual location: conditional self-isolation (Both levels)	Population-weighted average of region-specific values of ind_locat.med_stay.tot	[0,1]
	ind_locat.med_stay.nat.ave	Individual location: conditional self-isolation (National)	Population-weighted average of region-specific values of ind_locat.med_stay.nat	[0,1]
	ind_locat.med_stay.reg.ave	Individual location: conditional self-isolation (Regional)	Population-weighted average of region-specific values of ind_locat.med_stay.reg	[0,1]
	ind_locat.publ_tr.tot.ave	Individual location: closure of public transportation (Both levels)	Population-weighted average of region-specific values of ind_locat.publ_tr.tot	[0,1]
	ind_locat.publ_tr.nat.ave	Individual location: closure of public transportation (National)	Population-weighted average of region-specific values of ind_locat.publ_tr.nat	[0,1]
	ind_locat.publ_tr.reg.ave	Individual location: closure of public transportation (Regional)	Population-weighted average of region-specific values of ind_locat.publ_tr.reg	[0,1]
Closure of places of congregation:				
	places.all.tot.ave	Closures of places of human congregation: all components (Both levels)	Population-weighted average of region-specific values of places.all.tot	[0,1]
	places.all.nat.ave	Closures of places of human congregation: all components (National)	Population-weighted average of region-specific values of places.all.nat	[0,1]
	places.all.reg.ave	Closures of places of human congregation: all components (Regional)	Population-weighted average of region-specific values of places.all.reg	[0,1]
	places.gov_offs.tot.ave	Closures of places of human congregation: closure of government offices (Both levels)	Population-weighted average of region-specific values of places.gov_offs.tot	[0,1]
	places.gov_offs.nat.ave	Closures of places of human congregation: closure of government offices (National)	Population-weighted average of region-specific values of places.gov_offs.nat	[0,1]
	places.gov_offs.reg.ave	Closures of places of human congregation: closure of government offices (Regional)	Population-weighted average of region-specific values of places.gov_offs.reg	[0,1]
	places.ne_busn.tot.ave	Closures of places of human congregation: closure of non-essential businesses (Both levels)	Population-weighted average of region-specific values of places.ne_busn.tot	[0,1]
	places.ne_busn.nat.ave	Closures of places of human congregation: closure of non-essential businesses (National)	Population-weighted average of region-specific values of places.ne_busn.nat	[0,1]
	places.ne_busn.reg.ave	Closures of places of human congregation: closure of non-essential businesses (Regional)	Population-weighted average of region-specific values of places.ne_busn.reg	[0,1]
	places.restrts.tot.ave	Closures of places of human congregation: closure of restaurants (Both levels)	Population-weighted average of region-specific values of places.restrts.tot	[0,1]

	places.restrts.nat.ave	Closures of places of human congregation: closure of restaurants (National)	Population-weighted average of region-specific values of places.restrts.nat	[0,1]
	places.restrts.reg.ave	Closures of places of human congregation: closure of restaurants (Regional)	Population-weighted average of region-specific values of places.restrts.reg	[0,1]
	places.venues.tot.ave	Closures of places of human congregation: closure of venues of entertainment and leisure (Both levels)	Population-weighted average of region-specific values of places.venues.tot	[0,1]
	places.venues.nat.ave	Closures of places of human congregation: closure of venues of entertainment and leisure (National)	Population-weighted average of region-specific values of places.venues.nat	[0,1]
	places.venues.reg.ave	Closures of places of human congregation: closure of venues of entertainment and leisure (Regional)	Population-weighted average of region-specific values of places.venues.reg	[0,1]
	places.wfh.tot.ave	Closures of places of human congregation: working from home requirement (Both levels)	Population-weighted average of region-specific values of places.wfh.tot	[0,1]
	places.wfh.nat.ave	Closures of places of human congregation: working from home requirement (National)	Population-weighted average of region-specific values of places.wfh.nat	[0,1]
	places.wfh.reg.ave	Closures of places of human congregation: working from home requirement (Regional)	Population-weighted average of region-specific values of places.wfh.reg	[0,1]
Schools and social gatherings:				
	soc_and_schls.all.tot.ave	Closure of schools and restrictions on social gatherings: all components (Both levels)	Population-weighted average of region-specific values of soc_and_schls.all.tot	[0,1]
	soc_and_schls.all.nat.ave	Closure of schools and restrictions on social gatherings: all components (National)	Population-weighted average of region-specific values of soc_and_schls.all.nat	[0,1]
	soc_and_schls.all.reg.ave	Closure of schools and restrictions on social gatherings: all components (Regional)	Population-weighted average of region-specific values of soc_and_schls.all.reg	[0,1]
	soc_and_schls.schools.tot.ave	Closure of schools and restrictions on social gatherings: closure of schools (Both levels)	Population-weighted average of region-specific values of soc_and_schls.schools.tot	[0,1]
	soc_and_schls.schools.nat.ave	Closure of schools and restrictions on social gatherings: closure of schools (National)	Population-weighted average of region-specific values of soc_and_schls.schools.nat	[0,1]
	soc_and_schls.schools.reg.ave	Closure of schools and restrictions on social gatherings: closure of schools (Regional)	Population-weighted average of region-specific values of soc_and_schls.schools.reg	[0,1]

	soc_and_schls.soc_gath.tot.ave	Closure of schools and restrictions on social gatherings: limits on size of social gatherings (Both levels)	Population-weighted average of region-specific values of soc_and_schls.soc_gath.tot	[0,1]
	soc_and_schls.soc_gath.nat.ave	Closure of schools and restrictions on social gatherings: limits on size of social gatherings (National)	Population-weighted average of region-specific values of soc_and_schls.soc_gath.nat	[0,1]
	soc_and_schls.soc_gath.reg.ave	Closure of schools and restrictions on social gatherings: limits on size of social gatherings (Regional)	Population-weighted average of region-specific values of soc_and_schls.soc_gath.reg	[0,1]
Personal protective equipment:				
	masks.all.tot.ave	Mandatory wearing of personal protective equipment (Both levels)	Population-weighted average of region-specific values of masks.all.tot	[0,1]
	masks.all.nat.ave	Mandatory wearing of personal protective equipment (National)	Population-weighted average of region-specific values of masks.all.nat	[0,1]
	masks.all.reg.ave	Mandatory wearing of personal protective equipment (Regional)	Population-weighted average of region-specific values of masks.all.reg	[0,1]

Sub-national level Protective Policy Indices by Method 1 (PPI-M1)

	Variable name	Description	Construction	Range
Case Identification variables:				
	cname	Country name		
	isocode	ISO 3166 country code		
	isoabbr	country abbreviation according to ISO 3166		
	state_province	the name of the administrative division where the policy applies		
	iso_state	ISO 3166 code of the administrative division where the policy applies		
	date	date		
Protective Policy Index Method 1 (PPI-M1) calculated variables:				
	ppi.all.tot	Protective Policy Index (Both levels)	(9*borders.all.tot+3*emerg.all.tot+10*ind_locat.all.tot+8*places.all.tot+8*soc_and_schls.all.tot+2*masks.all.tot)/40	[0,1]
	ppi.all.nat	Protective Policy Index (National)	(9*borders.all.nat+3*emerg.all.nat+10*ind_locat.all.nat+8*places.all.nat+8*soc_and_schls.all.nat+2*masks.all.nat)/40	[0,1]
	ppi.all.reg	Protective Policy Index (Regional)	(9*borders.all.reg+3*emerg.all.reg+10*ind_locat.all.reg+8*places.all.reg+8*soc_and_schls.all.reg+2*masks.all.reg)/40	[0,1]
Borders:				
	borders.all.tot	Border closures: all components (Both levels)	(3*borders.air_bord.tot+3*borders.land_bord.tot+3*borders.sea_bord.tot)/9	[0,1]

	borders.all.nat	Border closures: all components (National)	(3*borders.air_bord.nat+3*borders.land_bord.nat+3*borders.sea_bord.nat)/9	[0,1]
	borders.all.reg	Border closures: all components (Regional)	(3*borders.air_bord.reg+3*borders.land_bord.reg+3*borders.sea_bord.reg)/9	[0,1]
	borders.air_bord.tot	Border closures: closure of air borders (Both levels)	max(borders.air_bord.nat,borders.air_bord.reg)	[0,1]
	borders.air_bord.nat	Border closures: closure of air borders (National)	directly coded	[0,1]
	borders.air_bord.reg	Border closures: closure of air borders (Regional)	directly coded	[0,1]
	borders.land_bord.tot	Border closures: closure of land borders (Both levels)	max(borders.land_bord.nat,borders.land_bord.reg)	[0,1]
	borders.land_bord.nat	Border closures: closure of land borders (National)	directly coded	[0,1]
	borders.land_bord.reg	Border closures: closure of land borders (Regional)	directly coded	[0,1]
	borders.sea_bord.tot	Border closures: closure of sea borders (Both levels)	max(borders.sea_bord.nat,borders.sea_bord.reg)	[0,1]
	borders.sea_bord.nat	Border closures: closure of sea borders (National)	directly coded	[0,1]
	borders.sea_bord.reg	Border closures: closure of sea borders (Regional)	directly coded	[0,1]
State of emergency:				
	emerg.all.tot	State of emergency (Both levels)	max(emerg.all.nat,emerg.all.reg)	[0,1]
	emerg.all.nat	State of emergency (National)	directly coded	[0,1]
	emerg.all.reg	State of emergency (Regional)	directly coded	[0,1]
Individual location restrictions:				
	ind_locat.all.tot	Individual location: all components (Both levels)	(5*ind_locat.ind_mob.tot+3*ind_locat.med_stay.tot+2*ind_locat.publ_tr.tot)/10	[0,1]
	ind_locat.all.nat	Individual location: all components (National)	(5*ind_locat.ind_mob.nat+3*ind_locat.med_stay.nat+2*ind_locat.publ_tr.nat)/10	[0,1]
	ind_locat.all.reg	Individual location: all components (Regional)	(5*ind_locat.ind_mob.reg+3*ind_locat.med_stay.reg+2*ind_locat.publ_tr.reg)/10	[0,1]
	ind_locat.ind_mob.tot	Individual location: restricted individual mobility (Both levels)	max(ind_locat.ind_mob.nat,ind_locat.ind_mob.reg)	[0,1]
	ind_locat.ind_mob.nat	Individual location: restricted individual mobility (National)	directly coded	[0,1]
	ind_locat.ind_mob.reg	Individual location: restricted individual mobility (Regional)	directly coded	[0,1]
	ind_locat.med_stay.tot	Individual location: conditional self-isolation (Both levels)	max(ind_locat.med_stay.nat,ind_locat.med_stay.reg)	[0,1]
	ind_locat.med_stay.nat	Individual location: conditional self-isolation (National)	directly coded	[0,1]

	ind_locat.med_stay.reg	Individual location: conditional self-isolation (Regional)	directly coded	[0,1]
	ind_locat.publ_tr.tot	Individual location: closure of public transportation (Both levels)	max(ind_locat.publ_tr.nat,ind_locat.publ_tr.reg)	[0,1]
	ind_locat.publ_tr.nat	Individual location: closure of public transportation (National)	directly coded	[0,1]
	ind_locat.publ_tr.reg	Individual location: closure of public transportation (Regional)	directly coded	[0,1]
Closure of places of congregation:				
	places.all.tot	Closures of places of human congregation: all components (Both levels)	(2*places.gov_offs.tot+2*places.ne_busn.tot+2*places.restrts.tot+1*places.venues.tot+1*places.wfh.tot)/8	[0,1]
	places.all.nat	Closures of places of human congregation: all components (National)	(2*places.gov_offs.nat+2*places.ne_busn.nat+2*places.restrts.nat+1*places.venues.nat+1*places.wfh.nat)/8	[0,1]
	places.all.reg	Closures of places of human congregation: all components (Regional)	(2*places.gov_offs.reg+2*places.ne_busn.reg+2*places.restrts.reg+1*places.venues.reg+1*places.wfh.reg)/8	[0,1]
	places.gov_offs.tot	Closures of places of human congregation: closure of government offices (Both levels)	max(places.gov_offs.nat,places.gov_offs.reg)	[0,1]
	places.gov_offs.nat	Closures of places of human congregation: closure of government offices (National)	directly coded	[0,1]
	places.gov_offs.reg	Closures of places of human congregation: closure of government offices (Regional)	directly coded	[0,1]
	places.ne_busn.tot	Closures of places of human congregation: closure of non-essential businesses (Both levels)	max(places.ne_busn.nat,places.ne_busn.reg)	[0,1]
	places.ne_busn.nat	Closures of places of human congregation: closure of non-essential businesses (National)	directly coded	[0,1]
	places.ne_busn.reg	Closures of places of human congregation: closure of non-essential businesses (Regional)	directly coded	[0,1]
	places.restrts.tot	Closures of places of human congregation: closure of restaurants (Both levels)	max(places.restrts.nat,places.restrts.reg)	[0,1]
	places.restrts.nat	Closures of places of human congregation: closure of restaurants (National)	directly coded	[0,1]
	places.restrts.reg	Closures of places of human congregation: closure of restaurants (Regional)	directly coded	[0,1]
	places.venues.tot	Closures of places of human congregation: closure of venues of	max(places.venues.nat,places.venues.reg)	[0,1]

		entertainment and leisure (Both levels)		
	places.venues.nat	Closures of places of human congregation: closure of venues of entertainment and leisure (National)	directly coded	[0,1]
	places.venues.reg	Closures of places of human congregation: closure of venues of entertainment and leisure (Regional)	directly coded	[0,1]
	places.wfh.tot	Closures of places of human congregation: working from home requirement (Both levels)	max(places.wfh.nat,places.wfh.reg)	[0,1]
	places.wfh.nat	Closures of places of human congregation: working from home requirement (National)	directly coded	[0,1]
	places.wfh.reg	Closures of places of human congregation: working from home requirement (Regional)	directly coded	[0,1]
Schools and social gatherings:				
	soc_and_schls.all.tot	Closure of schools and restrictions on social gatherings: all components (Both levels)	(4*soc_and_schls.schools.tot+4*soc_and_schls.soc_gath.tot)/8	[0,1]
	soc_and_schls.all.nat	Closure of schools and restrictions on social gatherings: all components (National)	(4*soc_and_schls.schools.nat+4*soc_and_schls.soc_gath.nat)/8	[0,1]
	soc_and_schls.all.reg	Closure of schools and restrictions on social gatherings: all components (Regional)	(4*soc_and_schls.schools.reg+4*soc_and_schls.soc_gath.reg)/8	[0,1]
	soc_and_schls.schools.tot	Closure of schools and restrictions on social gatherings: closure of schools (Both levels)	max(soc_and_schls.schools.nat,soc_and_schls.schools.reg)	[0,1]
	soc_and_schls.schools.nat	Closure of schools and restrictions on social gatherings: closure of schools (National)	directly coded	[0,1]
	soc_and_schls.schools.reg	Closure of schools and restrictions on social gatherings: closure of schools (Regional)	directly coded	[0,1]
	soc_and_schls.soc_gath.tot	Closure of schools and restrictions on social gatherings: limits on size of social gatherings (Both levels)	max(soc_and_schls.soc_gath.nat,soc_and_schls.soc_gath.reg)	[0,1]
	soc_and_schls.soc_gath.nat	Closure of schools and restrictions on social gatherings: limits on size of social gatherings (National)	directly coded	[0,1]
	soc_and_schls.soc_gath.reg	Closure of schools and restrictions on social gatherings: limits on size of social gatherings (Regional)	directly coded	[0,1]

Personal protective equipment:				
	masks.all.tot	Mandatory wearing of personal protective equipment (Both levels)	max(masks.all.nat,masks.all.reg)	[0,1]
	masks.all.nat	Mandatory wearing of personal protective equipment (National)	directly coded	[0,1]
	masks.all.reg	Mandatory wearing of personal protective equipment (Regional)	directly coded	[0,1]

The reported policies within each category are scored according to the following grid:

Method 1 stringency levels of component policies

Dimension	Description	Value	Criterion
borders.air_bord	Border closures: closure of air borders	1.00	All air borders are closed
		0.67	All international air borders are closed
		0.33	Air borders are closed for select countries
		0.00	All air borders are open
borders.land_bord	Border closures: closure of land borders	1.00	All land borders are closed
		0.67	All international land borders are closed
		0.33	Land borders with select countries are closed
		0.00	All land borders are open
borders.sea_bord	Border closures: closure of sea borders	1.00	All sea borders are closed
		0.67	All international sea borders are closed
		0.33	Sea borders with select countries are closed
		0.00	All sea borders are open
emerg.all	State of emergency	1.00	State of emergency
		0.00	No State of emergency
ind_locat.ind_mob	Individual location: restricted individual mobility	1.00	Lockdown (permission required
		0.80	Stay-at-home for all (no permission required
		0.40	Stay-at-home order just for specified groups
		0.20	No stay at home restrictions, curfew
		0.00	No stay at home or curfew restrictions
ind_locat.med_stay	Individual location: conditional self-isolation	1.00	Mandatory quarantine if diagnosed, exposed, or travelled
		0.33	Self-isolation mandtd for exposure and travel
		0.00	No mandatory quarantines or self-isolation
ind_locat.publ_tr	Individual location: closure of public transportation	1.00	Public transportation closed (except emergency routes)
		0.00	Public transportation not closed
places.gov_offs		1.00	Government offices are closed

	Closures of places of human congregation: closure of government offices	0.00	Government offices are open
places.ne_busn	Closures of places of human congregation: closure of non-essential businesses	1.00	Nonessential businesses are closed
		0.00	Nonessential businesses are open
places.restrts	Closures of places of human congregation: closure of restaurants	1.00	Restaurants are closed
		0.00	Restaurants are open
places.venues	Closures of places of human congregation: closure of venues of entertainment and leisure	1.00	Entertainment venues /stadiums are closed
		0.00	Entertainment venues /stadiums are open
places.wfh	Closures of places of human congregation: working from home requirement	1.00	Working from home is required
		0.00	No work-from-home requirement
soc_and_schls.schools	Closure of schools and restrictions on social gatherings: closure of schools	1.00	Full closure of K12 schools
		0.50	Partial closure of K12 schools
		0.00	K12 schools are not required to closed
soc_and_schls.soc_gath	Closure of schools and restrictions on social gatherings: limits on size of social gatherings	1.00	All social gatherings are prohibited
		0.75	Gatherings of 10 and more people are prohibited
		0.50	Gatherings of 50 and more people are prohibited
		0.25	Gatherings of 100 and more people are prohibited
		0.00	Social gatherings are not restricted
masks.all	Mandatory wearing of personal protective equipment	1.00	Mandatory wearing of masks/PPE
		0.00	No PPE/masks mandate

Method 2 stringency levels of component policies

Dimension	Description	Value	Criterion
borders.all	Border closures	1.00	All borders are closed
		0.63	All international borders are closed
		0.25	Borders are closed for select countries
		0.00	All borders are open
emerg.all	State of emergency	1.00	State of emergency
		0.00	No State of emergency
ind_locat.ind_mob		1.00	Lockdown (permission to exit home is required)

	Individual location: restricted individual mobility	0.80	Stay-at-home for all (no permission required
		0.40	Stay-at-home order just for specified groups
		0.10	No stay at home restrictions, curfew
		0.00	No stay at home or curfew restrictions
ind_locat.med_quar	Individual location: mandatory quarantine	1.00	Mandatory quarantine if diagnosis/exposure/travel
		0.50	Mandatory quarantine if diagnosis /exposure only
		0.25	Mandatory quarantine for diagnosis only
		0.00	Mandatory quarantines not imposed
ind_locat.med_stay	Individual location: conditional self-isolation	1.00	Self-isolation is mandated after exposure and travel
		0.00	Self-isolation not mandated
ind_locat.publ_tr	Individual location: closure of public transportation	1.00	Public transportation closed (except emergency routes)
		0.50	Public transportation limited to share of capacity/time
		0.00	Public transportation is fully open
places.gov_offs	Closures of places of human congregation: closure of government offices	1.00	Government offices are closed
		0.00	Government offices are open
places.ne_busn	Closures of places of human congregation: closure of non-essential businesses	1.00	Nonessential businesses are closed
		0.25	Nonessential businesses are closed (except curbside service/ outdoor construction)
		0.00	Nonessential businesses are open
places.restrts	Closures of places of human congregation: closure of restaurants	1.00	Restaurants are fully closed (except delivery and take-out)
		0.75	Restaurants are opened for outdoor, not indoor
		0.25	Restaurants are opened, reduced indoor capacity
		0.00	Restaurants are fully open
places.venues	Closures of places of human congregation: closure of venues of entertainment and leisure	1.00	Entertainment venues /stadiums are closed
		0.50	Only outdoors entertainment venues are open
		0.00	Entertainment venues /stadiums are open
places.wfh	Closures of places of human congregation: working from home requirement	1.00	Working from home is required
		0.00	No work-from-home requirement
soc_and_schls.schools		1.00	Full closure of K12 schools

	Closure of schools and restrictions on social gatherings: closure of schools	0.50	Partial closure of K12 schools
		0.00	K12 schools are not required to closed
soc_and_schls.soc_gath	Closure of schools and restrictions on social gatherings: limits on size of social gatherings	1.00	All social gatherings are prohibited
		0.75	Gatherings of 10 and more people are prohibited
		0.50	Gatherings of 50 and more people are prohibited
		0.25	Gatherings of 100 and more people are prohibited
		0.00	Social gatherings are not restricted
med_mandate.dist_mand	Medical mandate: social distancing mandates	1.00	Safe distance 1.5-2m outdoors and in public spaces
		0.50	Safe distance 1.5-2m in business/organizations
		0.00	No safe distance mandate
med_mandate.masks	Medical mandate: mandatory wearing of personal protective equipment	1.00	Mandatory wearing of masks/PPE except at home
		0.67	Mandatory wearing of masks/PPE indoors
		0.33	Mandatory wearing of masks/PPE for employees
		0.00	No PPE/masks mandate

Country-level Protective Policy Index Method 2 (PPI-M2-N) dataset

	Variable name	Description	Construction	Range
Case Identification variables:				
	cname	Country name		
	isocode	ISO 3166 country code		
	isoabbr	country abbreviation according to ISO 3166		
	date	date		
Protective Policy Index Method 2 (PPI-M2) calculated variables:				
	ppi.all.tot.ave.2	Protective Policy Index (Both levels)	Population-weighted average of region-specific values of ppi.all.tot.2	[0,1]
	ppi.all.nat.ave.2	Protective Policy Index (National)	Population-weighted average of region-specific values of ppi.all.nat.2	[0,1]
	ppi.all.reg.ave.2	Protective Policy Index (Regional)	Population-weighted average of region-specific values of ppi.all.reg.2	[0,1]
Borders:				
	borders.all.tot.ave.2	Border closures (Both levels)	Population-weighted average of region-specific values of borders.all.tot.2	[0,1]

	borders.all.nat.ave.2	Border closures (National)	Population-weighted average of region-specific values of borders.all.nat.2	[0,1]
	borders.all.reg.ave.2	Border closures (Regional)	Population-weighted average of region-specific values of borders.all.reg.2	[0,1]
State of emergency:				
	emerg.all.tot.ave.2	State of emergency (Both levels)	Population-weighted average of region-specific values of emerg.all.tot.2	[0,1]
	emerg.all.nat.ave.2	State of emergency (National)	Population-weighted average of region-specific values of emerg.all.nat.2	[0,1]
	emerg.all.reg.ave.2	State of emergency (Regional)	Population-weighted average of region-specific values of emerg.all.reg.2	[0,1]
Individual location restrictions:				
	ind_locat.all.tot.ave.2	Individual location: all components (Both levels)	Population-weighted average of region-specific values of ind_locat.all.tot.2	[0,1]
	ind_locat.all.nat.ave.2	Individual location: all components (National)	Population-weighted average of region-specific values of ind_locat.all.nat.2	[0,1]
	ind_locat.all.reg.ave.2	Individual location: all components (Regional)	Population-weighted average of region-specific values of ind_locat.all.reg.2	[0,1]
	ind_locat.ind_mob.tot.ave.2	Individual location: restricted individual mobility (Both levels)	Population-weighted average of region-specific values of ind_locat.ind_mob.tot.2	[0,1]
	ind_locat.ind_mob.nat.ave.2	Individual location: restricted individual mobility (National)	Population-weighted average of region-specific values of ind_locat.ind_mob.nat.2	[0,1]
	ind_locat.ind_mob.reg.ave.2	Individual location: restricted individual mobility (Regional)	Population-weighted average of region-specific values of ind_locat.ind_mob.reg.2	[0,1]
	ind_locat.med_quar.tot.ave.2	Individual location: mandatory quarantine (Both levels)	Population-weighted average of region-specific values of ind_locat.med_quar.tot.2	[0,1]
	ind_locat.med_quar.nat.ave.2	Individual location: mandatory quarantine (National)	Population-weighted average of region-specific values of ind_locat.med_quar.nat.2	[0,1]
	ind_locat.med_quar.reg.ave.2	Individual location: mandatory quarantine (Regional)	Population-weighted average of region-specific values of ind_locat.med_quar.reg.2	[0,1]
	ind_locat.med_stay.tot.ave.2	Individual location: conditional self-isolation (Both levels)	Population-weighted average of region-specific values of ind_locat.med_stay.tot.2	[0,1]
	ind_locat.med_stay.nat.ave.2	Individual location: conditional self-isolation (National)	Population-weighted average of region-specific values of ind_locat.med_stay.nat.2	[0,1]
	ind_locat.med_stay.reg.ave.2	Individual location: conditional self-isolation (Regional)	Population-weighted average of region-specific values of ind_locat.med_stay.reg.2	[0,1]

	ind_locat.publ_tr.tot.ave.2	Individual location: closure of public transportation (Both levels)	Population-weighted average of region-specific values of ind_locat.publ_tr.tot.2	[0,1]
	ind_locat.publ_tr.nat.ave.2	Individual location: closure of public transportation (National)	Population-weighted average of region-specific values of ind_locat.publ_tr.nat.2	[0,1]
	ind_locat.publ_tr.reg.ave.2	Individual location: closure of public transportation (Regional)	Population-weighted average of region-specific values of ind_locat.publ_tr.reg.2	[0,1]
Closure of places of congregation:				
	places.all.tot.ave.2	Closures of places of human congregation: all components (Both levels)	Population-weighted average of region-specific values of places.all.tot.2	[0,1]
	places.all.nat.ave.2	Closures of places of human congregation: all components (National)	Population-weighted average of region-specific values of places.all.nat.2	[0,1]
	places.all.reg.ave.2	Closures of places of human congregation: all components (Regional)	Population-weighted average of region-specific values of places.all.reg.2	[0,1]
	places.gov_offs.tot.ave.2	Closures of places of human congregation: closure of government offices (Both levels)	Population-weighted average of region-specific values of places.gov_offs.tot.2	[0,1]
	places.gov_offs.nat.ave.2	Closures of places of human congregation: closure of government offices (National)	Population-weighted average of region-specific values of places.gov_offs.nat.2	[0,1]
	places.gov_offs.reg.ave.2	Closures of places of human congregation: closure of government offices (Regional)	Population-weighted average of region-specific values of places.gov_offs.reg.2	[0,1]
	places.ne_busn.tot.ave.2	Closures of places of human congregation: closure of non-essential businesses (Both levels)	Population-weighted average of region-specific values of places.ne_busn.tot.2	[0,1]
	places.ne_busn.nat.ave.2	Closures of places of human congregation: closure of non-essential businesses (National)	Population-weighted average of region-specific values of places.ne_busn.nat.2	[0,1]
	places.ne_busn.reg.ave.2	Closures of places of human congregation: closure of non-essential businesses (Regional)	Population-weighted average of region-specific values of places.ne_busn.reg.2	[0,1]
	places.restrts.tot.ave.2	Closures of places of human congregation: closure of restaurants (Both levels)	Population-weighted average of region-specific values of places.restrts.tot.2	[0,1]
	places.restrts.nat.ave.2	Closures of places of human congregation: closure of restaurants (National)	Population-weighted average of region-specific values of places.restrts.nat.2	[0,1]
	places.restrts.reg.ave.2	Closures of places of human congregation: closure of restaurants (Regional)	Population-weighted average of region-specific values of places.restrts.reg.2	[0,1]

	places.venues.tot.ave.2	Closures of places of human congregation: closure of venues of entertainment and leisure (Both levels)	Population-weighted average of region-specific values of places.venues.tot.2	[0,1]
	places.venues.nat.ave.2	Closures of places of human congregation: closure of venues of entertainment and leisure (National)	Population-weighted average of region-specific values of places.venues.nat.2	[0,1]
	places.venues.reg.ave.2	Closures of places of human congregation: closure of venues of entertainment and leisure (Regional)	Population-weighted average of region-specific values of places.venues.reg.2	[0,1]
	places.wfh.tot.ave.2	Closures of places of human congregation: working from home requirement (Both levels)	Population-weighted average of region-specific values of places.wfh.tot.2	[0,1]
	places.wfh.nat.ave.2	Closures of places of human congregation: working from home requirement (National)	Population-weighted average of region-specific values of places.wfh.nat.2	[0,1]
	places.wfh.reg.ave.2	Closures of places of human congregation: working from home requirement (Regional)	Population-weighted average of region-specific values of places.wfh.reg.2	[0,1]
Schools and social gatherings:				
	soc_and_schls.all.tot.ave.2	Closure of schools and restrictions on social gatherings: all components (Both levels)	Population-weighted average of region-specific values of soc_and_schls.all.tot.2	[0,1]
	soc_and_schls.all.nat.ave.2	Closure of schools and restrictions on social gatherings: all components (National)	Population-weighted average of region-specific values of soc_and_schls.all.nat.2	[0,1]
	soc_and_schls.all.reg.ave.2	Closure of schools and restrictions on social gatherings: all components (Regional)	Population-weighted average of region-specific values of soc_and_schls.all.reg.2	[0,1]
	soc_and_schls.schools.tot.ave.2	Closure of schools and restrictions on social gatherings: closure of schools (Both levels)	Population-weighted average of region-specific values of soc_and_schls.schools.tot.2	[0,1]
	soc_and_schls.schools.nat.ave.2	Closure of schools and restrictions on social gatherings: closure of schools (National)	Population-weighted average of region-specific values of soc_and_schls.schools.nat.2	[0,1]
	soc_and_schls.schools.reg.ave.2	Closure of schools and restrictions on social gatherings: closure of schools (Regional)	Population-weighted average of region-specific values of soc_and_schls.schools.reg.2	[0,1]
	soc_and_schls.soc_gath.tot.ave.2	Closure of schools and restrictions on social gatherings: limits on size of social gatherings (Both levels)	Population-weighted average of region-specific values of soc_and_schls.soc_gath.tot.2	[0,1]
	soc_and_schls.soc_gath.nat.ave.2	Closure of schools and restrictions on social gatherings: limits on size of social gatherings (National)	Population-weighted average of region-specific values of soc_and_schls.soc_gath.nat.2	[0,1]

	soc_and_schls.soc_gath.reg.ave.2	Closure of schools and restrictions on social gatherings: limits on size of social gatherings (Regional)	Population-weighted average of region-specific values of soc_and_schls.soc_gath.reg.2	[0,1]
Medical mandate:				
	med_mandate.all.tot.ave.2	Medical mandate: all components (Both levels)	Population-weighted average of region-specific values of med_mandate.all.tot.2	[0,1]
	med_mandate.all.nat.ave.2	Medical mandate: all components (National)	Population-weighted average of region-specific values of med_mandate.all.nat.2	[0,1]
	med_mandate.all.reg.ave.2	Medical mandate: all components (Regional)	Population-weighted average of region-specific values of med_mandate.all.reg.2	[0,1]
	med_mandate.dist_mand.tot.ave.2	Medical mandate: social distancing mandates (Both levels)	Population-weighted average of region-specific values of med_mandate.dist_mand.tot.2	[0,1]
	med_mandate.dist_mand.nat.ave.2	Medical mandate: social distancing mandates (National)	Population-weighted average of region-specific values of med_mandate.dist_mand.nat.2	[0,1]
	med_mandate.dist_mand.reg.ave.2	Medical mandate: social distancing mandates (Regional)	Population-weighted average of region-specific values of med_mandate.dist_mand.reg.2	[0,1]
	med_mandate.masks.tot.ave.2	Medical mandate: mandatory wearing of personal protective equipment (Both levels)	Population-weighted average of region-specific values of med_mandate.masks.tot.2	[0,1]
	med_mandate.masks.nat.ave.2	Medical mandate: mandatory wearing of personal protective equipment (National)	Population-weighted average of region-specific values of med_mandate.masks.nat.2	[0,1]
	med_mandate.masks.reg.ave.2	Medical mandate: mandatory wearing of personal protective equipment (Regional)	Population-weighted average of region-specific values of med_mandate.masks.reg.2	[0,1]

Sub-national level Protective Policy Indices by Method 2 (PPI-M2-R)

	Variable name	Description	Construction	Range
Case Identification variables:				
	cname	Country name		
	isocode	ISO 3166 country code		
	isoabbr	country abbreviation according to ISO 3166		
	state_province	the name of the administrative division where the policy applies		
	iso_state	ISO 3166 code of the administrative division where the policy applies		

	date	date		
Protective Policy Index Method 1 (PPI-M2) calculated variables:				
	ppi.all.tot.2	Protective Policy Index (Both levels)	(8*borders.all.tot.2+3*emerg.all.tot.2+20*ind_locat.all.tot.2+16*places.all.tot.2+16*soc_and_schls.all.tot.2+10*med_mandate.all.tot.2)/73	[0,1]
	ppi.all.nat.2	Protective Policy Index (National)	(8*borders.all.nat.2+3*emerg.all.nat.2+20*ind_locat.all.nat.2+16*places.all.nat.2+16*soc_and_schls.all.nat.2+10*med_mandate.all.nat.2)/73	[0,1]
	ppi.all.reg.2	Protective Policy Index (Regional)	(8*borders.all.reg.2+3*emerg.all.reg.2+20*ind_locat.all.reg.2+16*places.all.reg.2+16*soc_and_schls.all.reg.2+10*med_mandate.all.reg.2)/73	[0,1]
Borders:				
	borders.all.tot.2	Border closures (Both levels)	max(borders.all.nat.2,borders.all.reg.2)	[0,1]
	borders.all.nat.2	Border closures (National)	max(borders.all.nat,borders.all.nat)	[0,1]
	borders.all.reg.2	Border closures (Regional)	max(borders.all.reg,borders.all.reg)	[0,1]
State of emergency:				
	emerg.all.tot.2	State of emergency (Both levels)	max(emerg.all.nat.2,emerg.all.reg.2)	[0,1]
	emerg.all.nat.2	State of emergency (National)	directly coded	[0,1]
	emerg.all.reg.2	State of emergency (Regional)	directly coded	[0,1]
Individual location restrictions:				
	ind_locat.all.tot.2	Individual location: all components (Both levels)	(10*ind_locat.ind_mob.tot.2+4*ind_locat.med_quar.tot.2+2*ind_locat.med_stay.tot.2+4*ind_locat.publ_tr.tot.2)/20	[0,1]
	ind_locat.all.nat.2	Individual location: all components (National)	(10*ind_locat.ind_mob.nat.2+4*ind_locat.med_quar.nat.2+2*ind_locat.med_stay.nat.2+4*ind_locat.publ_tr.nat.2)/20	[0,1]
	ind_locat.all.reg.2	Individual location: all components (Regional)	(10*ind_locat.ind_mob.reg.2+4*ind_locat.med_quar.reg.2+2*ind_locat.med_stay.reg.2+4*ind_locat.publ_tr.reg.2)/20	[0,1]
	ind_locat.ind_mob.tot.2	Individual location: restricted individual mobility (Both levels)	max(ind_locat.ind_mob.nat.2,ind_locat.ind_mob.reg.2)	[0,1]
	ind_locat.ind_mob.nat.2	Individual location: restricted individual mobility (National)	directly coded	[0,1]
	ind_locat.ind_mob.reg.2	Individual location: restricted individual mobility (Regional)	directly coded	[0,1]
	ind_locat.med_quar.tot.2	Individual location: mandatory quarantine (Both levels)	max(ind_locat.med_quar.nat.2,ind_locat.med_quar.reg.2)	[0,1]
	ind_locat.med_quar.nat.2	Individual location: mandatory quarantine (National)	directly coded	[0,1]
	ind_locat.med_quar.reg.2	Individual location: mandatory quarantine (Regional)	directly coded	[0,1]

	ind_locat.med_stay.tot.2	Individual location: conditional self-isolation (Both levels)	max(ind_locat.med_stay.nat.2,ind_locat.med_stay.reg.2)	[0,1]
	ind_locat.med_stay.nat.2	Individual location: conditional self-isolation (National)	directly coded	[0,1]
	ind_locat.med_stay.reg.2	Individual location: conditional self-isolation (Regional)	directly coded	[0,1]
	ind_locat.publ_tr.tot.2	Individual location: closure of public transportation (Both levels)	max(ind_locat.publ_tr.nat.2,ind_locat.publ_tr.reg.2)	[0,1]
	ind_locat.publ_tr.nat.2	Individual location: closure of public transportation (National)	directly coded	[0,1]
	ind_locat.publ_tr.reg.2	Individual location: closure of public transportation (Regional)	directly coded	[0,1]
Closure of places of congregation:				
	places.all.tot.2	Closures of places of human congregation: all components (Both levels)	(4*places.gov_offs.tot.2+4*places.ne_busn.tot.2+4*places.restrts.tot.2+2*places.venues.tot.2+2*places.wfh.tot.2)/16	[0,1]
	places.all.nat.2	Closures of places of human congregation: all components (National)	(4*places.gov_offs.nat.2+4*places.ne_busn.nat.2+4*places.restrts.nat.2+2*places.venues.nat.2+2*places.wfh.nat.2)/16	[0,1]
	places.all.reg.2	Closures of places of human congregation: all components (Regional)	(4*places.gov_offs.reg.2+4*places.ne_busn.reg.2+4*places.restrts.reg.2+2*places.venues.reg.2+2*places.wfh.reg.2)/16	[0,1]
	places.gov_offs.tot.2	Closures of places of human congregation: closure of government offices (Both levels)	max(places.gov_offs.nat.2,places.gov_offs.reg.2)	[0,1]
	places.gov_offs.nat.2	Closures of places of human congregation: closure of government offices (National)	directly coded	[0,1]
	places.gov_offs.reg.2	Closures of places of human congregation: closure of government offices (Regional)	directly coded	[0,1]
	places.ne_busn.tot.2	Closures of places of human congregation: closure of non-essential businesses (Both levels)	max(places.ne_busn.nat.2,places.ne_busn.reg.2)	[0,1]
	places.ne_busn.nat.2	Closures of places of human congregation: closure of non-essential businesses (National)	directly coded	[0,1]
	places.ne_busn.reg.2	Closures of places of human congregation: closure of non-essential businesses (Regional)	directly coded	[0,1]
	places.restrts.tot.2	Closures of places of human congregation: closure of restaurants (Both levels)	max(places.restrts.nat.2,places.restrts.reg.2)	[0,1]

	places.restrts.nat.2	Closures of places of human congregation: closure of restaurants (National)	directly coded	[0,1]
	places.restrts.reg.2	Closures of places of human congregation: closure of restaurants (Regional)	directly coded	[0,1]
	places.venues.tot.2	Closures of places of human congregation: closure of venues of entertainment and leisure (Both levels)	max(places.venues.nat.2,places.venues.reg.2)	[0,1]
	places.venues.nat.2	Closures of places of human congregation: closure of venues of entertainment and leisure (National)	directly coded	[0,1]
	places.venues.reg.2	Closures of places of human congregation: closure of venues of entertainment and leisure (Regional)	directly coded	[0,1]
	places.wfh.tot.2	Closures of places of human congregation: working from home requirement (Both levels)	max(places.wfh.nat.2,places.wfh.reg.2)	[0,1]
	places.wfh.nat.2	Closures of places of human congregation: working from home requirement (National)	directly coded	[0,1]
	places.wfh.reg.2	Closures of places of human congregation: working from home requirement (Regional)	directly coded	[0,1]
Schools and social gatherings:				
	soc_and_schls.all.tot.2	Closure of schools and restrictions on social gatherings: all components (Both levels)	(8*soc_and_schls.schools.tot.2+8*soc_and_schls.soc_gath.tot.2)/16	[0,1]
	soc_and_schls.all.nat.2	Closure of schools and restrictions on social gatherings: all components (National)	(8*soc_and_schls.schools.nat.2+8*soc_and_schls.soc_gath.nat.2)/16	[0,1]
	soc_and_schls.all.reg.2	Closure of schools and restrictions on social gatherings: all components (Regional)	(8*soc_and_schls.schools.reg.2+8*soc_and_schls.soc_gath.reg.2)/16	[0,1]
	soc_and_schls.schools.tot.2	Closure of schools and restrictions on social gatherings: closure of schools (Both levels)	max(soc_and_schls.schools.nat.2,soc_and_schls.schools.reg.2)	[0,1]
	soc_and_schls.schools.nat.2	Closure of schools and restrictions on social gatherings: closure of schools (National)	directly coded	[0,1]
	soc_and_schls.schools.reg.2	Closure of schools and restrictions on social gatherings: closure of schools (Regional)	directly coded	[0,1]

	soc_and_schls.soc_gath.tot.2	Closure of schools and restrictions on social gatherings: limits on size of social gatherings (Both levels)	max(soc_and_schls.soc_gath.nat.2,soc_and_schls.soc_gath.reg.2)	[0,1]
	soc_and_schls.soc_gath.nat.2	Closure of schools and restrictions on social gatherings: limits on size of social gatherings (National)	directly coded	[0,1]
	soc_and_schls.soc_gath.reg.2	Closure of schools and restrictions on social gatherings: limits on size of social gatherings (Regional)	directly coded	[0,1]
Medical mandate:				
	med_mandate.all.tot.2	Medical mandate: all components (Both levels)	(4*med_mandate.dist_mand.tot.2+6*med_mandate.masks.tot.2)/10	[0,1]
	med_mandate.all.nat.2	Medical mandate: all components (National)	(4*med_mandate.dist_mand.nat.2+6*med_mandate.masks.nat.2)/10	[0,1]
	med_mandate.all.reg.2	Medical mandate: all components (Regional)	(4*med_mandate.dist_mand.reg.2+6*med_mandate.masks.reg.2)/10	[0,1]
	med_mandate.dist_mand.tot.2	Medical mandate: social distancing mandates (Both levels)	max(med_mandate.dist_mand.nat.2,med_mandate.dist_mand.reg.2)	[0,1]
	med_mandate.dist_mand.nat.2	Medical mandate: social distancing mandates (National)	directly coded	[0,1]
	med_mandate.dist_mand.reg.2	Medical mandate: social distancing mandates (Regional)	directly coded	[0,1]
	med_mandate.masks.tot.2	Medical mandate: mandatory wearing of personal protective equipment (Both levels)	max(med_mandate.masks.nat.2,med_mandate.masks.reg.2)	[0,1]
	med_mandate.masks.nat.2	Medical mandate: mandatory wearing of personal protective equipment (National)	directly coded	[0,1]
	med_mandate.masks.reg.2	Medical mandate: mandatory wearing of personal protective equipment (Regional)	directly coded	[0,1]

AUXILIARY FILE (Policy Announcements)

changes_regions_m1: Stores information about the reports that brought about the changes in the active policies included in PPI_regions_ZZ_m1 files

	Variable name	Description	Construction	Range
Case Identification variables:				
	cname	Country name		
	isocode	ISO 3166 country code		
	isoabbr	country abbreviation according to ISO 3166		
	state_province	the name of the administrative division where the policy applies		
	iso_state	ISO 3166 code of the administrative division where the policy applies		
	date	date		
	dimension	policy dimension		{air_bord, land_bord, sea_bord, soc_gath, schools, emerg, venues, restrts, ne_busn, gov_offs, ind_mob, med_stay, wfh, publ_tr, masks}
	subnational	binary indicator marking whether the change applies to the national or regional policies		{0,1}
Calculated case variables:				
	total_change	total change in the policy value from the preceding date	difference between the policy values on the given dimension in a given locale on the current date from the preceding date	[-1,1]
Report variables:				
	branch	branch of government announcing the policy		{executive leadership, bureaucracy, legislative, judiciary,

				missing, other}
	who	contains information on who announced the policy		
	institution	contains information on what institution announced the policy		
	report_date	the date of the report used to code the policy/policy announcement date		
	exportation_date	the date when the policy expires		
	report_change	the change in the policy value from the preceding date according to the report		
	source_link	the link to the source of the data		