Appendix 1

1. Compliance with the Guidelines for Accurate and Transparent Health Estimates Reporting (GATHER)

Table 1: GATHER checklist

CHECKLIST ITEM	DESCRIPTION OF COMPLIANCE
Objectives and funding	
1. Define the indicator(s), populations (including age, sex, and geographic entities), and time period(s) for which estimates were made.	• Manuscript: Methods (Data inputs [Inclusion criteria])
2. List the funding sources for the work.	• Manuscript: Summary (Funding)
Data inputs	
For all data inputs from multiple sources that are synthesised as part of the study:	
3. Describe how the data were identified and how the data were accessed.	• Manuscript: Methods (Data inputs [Identifying and accessing suicide data])
4. Specify the inclusion and exclusion criteria. Identify all ad-hoc exclusions.	• Manuscript: Methods (Data inputs [Inclusion criteria])
5. Provide information about all included data sources and their main characteristics. For each data source used, report reference information or contact name/institution, population represented, data collection method, year(s) of data collection, sex and age range, diagnostic criteria or measurement method, and sample size, as relevant.	• Manuscript: Table 1 • Appendix: Section 4 (Country/area-within-country suicide data)
6. Identify and describe any categories of input data that have potentially important biases (e.g., based on characteristics listed in item 5).	• Manuscript: Table 1; Results; Discussion (Strengths and limitations) • Appendix: Section 4 (Country/area-within-country suicide data)
For data inputs that contribute to the analysis but were not synthesised as part of the study:	
7. Describe and give sources for any other data inputs.	• Not applicable.
For all data inputs:	
8. Provide all data inputs in a file format from which data can be efficiently extracted (e.g., a spreadsheet rather than a PDF), including all relevant meta-data listed in item 5. For any data inputs that cannot be shared because of ethical or legal reasons, such as third-party ownership, provide a contact name or the name of the institution that retains the right to the data.	• Appendix: Section 5 (Raw data from countries/areas-within-countries)
Data analysis	
9. Provide a conceptual overview of the data analysis method. A diagram may be helpful.	• Manuscript: Methods (Data analysis and presentation)
10. Provide a detailed description of all steps of the analysis, including mathematical formulae. This description should cover, as relevant, data cleaning, data pre-processing, data adjustments and weighting of data sources, and mathematical or statistical model(s).	• Manuscript: Methods (Data analysis)
11. Describe how candidate models were evaluated and how the final model(s) were selected.	• Manuscript: Methods (Data analysis and presentation)
12. Provide the results of an evaluation of model performance, if done, as well as the results of any relevant sensitivity analysis.	• Manuscript: Methods (Data analysis and presentation)
13. Describe methods of calculating uncertainty of the estimates. State which sources of uncertainty were, and were not, accounted for in the uncertainty analysis.	• Manuscript: Methods (Data analysis)
14. State how analytical or statistical source code used to generate estimates can be accessed.	• Appendix: Section 3 (Stata code used to generate results)
Results and discussion	

CHECKLIST ITEM	DESCRIPTION OF COMPLIANCE
15. Provide published estimates in a file format from which data can be efficiently extracted.	• Appendix: Sections 6-9 (Summary results) and 10-13 (Full results)
16. Report a quantitative measure of the uncertainty of the estimates (e.g., uncertainty intervals).	• Appendix: Section 10-13 (Full results)
17. Interpret results in light of existing evidence. If updating a previous set of estimates, describe the reasons for changes in estimates.	• Manuscript: Discussion
18. Discuss limitations of the estimates. Include a discussion of any modelling assumptions or data limitations that affect interpretation of the estimates.	• Manuscript: Discussion (Strengths and limitations)

2. Data modelling strategy

Our modelling strategy was to first identify the baseline trend in suicides in each country or area-within-country using the pre-COVID data. We then used this model to forecast the expected number of suicides in the COVID period, comparing it with the observed number of suicides in the same period. To estimate how far the observed suicides differed from the expected suicides, we calculated the rate ratio, defined as the observed divided by the expected number of suicides, and it's 95% confidence interval. Formulas for these statistics are contained in Modern Epidemiology (4th Edition), pages 399-400.

We considered four possible models of the baseline trend. These were:

1. A model that included non-linear time trends and seasonality. We accounted for non-linear time trends by including polynomial terms for time (i.e time and time2). We accounted for seasonality using Fourier terms – pairs of sine and cosine variables that allow for oscillations over a 12-month period of a variety of different shapes.
2. A model that allowed for linear time trends and seasonality. In this model, time was entered as a linear time trend only and we accounted for seasonality in the same way as model 1.
3. A model that allowed for non-linear time trends only. Non-linear time trends were entered in the same way as model 1. Seasonality terms were excluded.
4. A model that allowed for linear time trends only. That is, time was entered in the same way as model 2 and seasonality was excluded.

All of these models were fit to each time series, and the best fitting model was selected on the basis of the Akaike's information criterion (the AIC statistic). The AIC statistic estimates the amount of information lost in each model. The best fitting model is the one with the best goodness of fit after including a penalty for the number of parameters estimated. Thus, we selected the model with the lowest AIC value.

Finally, in some countries or areas-within-countries, there were a very low number of monthly suicides, and the rate ratios that we generated were implausibly large. In this situation, we forced the algorithm to fit only model 4 to the data (i.e. linear time trend only). Our criteria for doing this was when there fewer than 1 suicide per month on average in the pre-COVID period.

3. Stata code used to generate results

The Stata code to generate the results is separated into two main components. One component is the program -itsselect- which fits the four models under investigation to a time series. This program is copied below. The second component is the dofiles that call -itsselect- and then gather the results and calculate the rate ratios and confidence intervals from the observed and expected values. There are four such dofiles corresponding to an analysis of (1) total suicides, (2) age-stratified suicides, (3) sex-stratified suicides and (4) age-sex stratified suicides. The first of these dofiles – the analysis of total suicides – is reproduced below. (The three other dofiles are all similar in structure).

```
/* ------------------------------------------------------ */
/* itsselect: identifies and fits the best fitting model */
/* ------------------------------------------------------ */

mata:
void gen_minindex(string scalar m, string scalar idx)
{
      real matrix A
      real colvector v

      A = st_matrix(m)
      minindex(A, 1, v=., .)
      st_matrix(idx, v)
}
end

capture program drop itsselect
      program define itsselect, rclass
      version 16.1
      syntax varname, [covid(integer `=tm(2020m4)')  ///
            begin(integer `=tm(2016m1)') end(integer `=tm(2020m12)')]

      preserve

      // select observations for analysis
      qui keep if date >= `begin' & date <= `end'

      // covid indicator
      gen covid = date >= `covid'

      // time trends variables
      gen time = _n - 1
      label var time "Time trend"

      gen time2 = time*time

      gen degrees=(time/12)*360
      gen cos_11 = cos(1 * _pi * degrees/180)
      gen cos_21 = cos(2 * _pi * degrees/180)
      gen sin_11 = sin(1 * _pi * degrees/180)
      gen sin_21 = sin(2 * _pi * degrees/180)


      // fit the simplest possible model if < 1 suicide per month
      // (on average)
      qui sum `varlist' if covid == 0
      if r(mean) < 1 {
            qui glm `varlist' time ///
                  if covid == 0, family(poisson) link(log) scale(x2)

      est store m4
      local best "m4-forced"
      }
```

```
	// otherwise fit all four models to the data and
	// select the best
	else {
		qui glm `varlist' time time2 cos* sin* ///
			if covid == 0, family(poisson) link(log) scale(x2)

		est store m1

		qui glm `varlist' time cos* sin* ///
			if covid == 0, family(poisson) link(log) scale(x2)

		est store m2

		qui glm `varlist' time time2 ///
			if covid == 0, family(poisson) link(log) scale(x2)

		est store m3
		qui glm `varlist' time ///
			if covid == 0, family(poisson) link(log) scale(x2)

		est store m4

		// select the best
		est stats m1 m2 m3 m4
		matrix stats = r(S)
		matrix aic = stats[1..4, 5]
		mata: gen_minindex("aic", "min")
		local best m`=min[1,1]'

		est restore `best'
	}
	glm

	// did the final model converge?
	return scalar converged = e(converged)

	// obs and expected suicides
	qui sum `varlist' if covid == 1
	return scalar obs = r(sum)

	predict expected if `varlist' != ., mu
	qui sum expected if covid == 1
	return scalar exp = r(sum)

	return local model "`best'"

	// wntestq
	qui tsset time
	qui predict resid, response
	wntestq resid
	return scalar wntestq = r(p)

	// dates
	return local begin `=string(`begin', "%tm")'
	return local end   `=string(`end', "%tm")'
	return local covid `=string(`covid', "%tm")'

	// tidy up
	restore
end

/* -------------- */
/* Total suicides */
/* -------------- */

/* Open a postfile to save the results */
```

```
tempfile myfile
tempname p
postfile `p' str45(place) str30(outcome) ///
      str7(bdate cdate edate) str9(model) ///
      float(analysis obs exp wntestq converged) using `myfile'

/* ------------------------ */
/* Through to December 2020 */
/* ------------------------ */

local myfiles: dir clean files "*_sheet1.dta"

foreach dataset of local myfiles {
      use "clean/`dataset'", clear

      qui sum date if total != .

      if r(min) < `=tm(2016m1)' {
            local min = `=tm(2016m1)'
      }
      else {
            local min = r(min)
      }

      itsselect total, begin(`min') end(`=tm(2020m12)')

      post `p' ("`dataset'") ("total") ("`=r(begin)'") ///
            ("`=r(covid)'") ("`=r(end)'") ("`=r(model)'") ///
            (1) (`=r(obs)') (`=r(exp)') (`=r(wntestq)') ///
            (`=r(converged)')
}

/* --------------------------- */
/* Through to latest available  */
/* --------------------------- */

local myfiles: dir clean files "*_sheet1.dta"

foreach dataset of local myfiles {
      use "clean/`dataset'", clear

      qui sum date if total != .

      if r(min) < `=tm(2016m1)' {
            local min = tm(2016m1)
      }
      else {
            local min = r(min)
      }

      local max = r(max)

      if r(max) <= `=tm(2021m6)' {
            local max = r(max)
      }
      if r(max) > tm(2021m6) {
            local max = tm(2021m6)
      }

      itsselect total, begin(`min') end(`max')

      post `p' ("`dataset'") ("total") ("`=r(begin)'") ///
      ("`=r(covid)'") ("`=r(end)'") ("`=r(model)'") (2) ///
      (`=r(obs)') (`=r(exp)') (`=r(wntestq)') (`=r(converged)')
}
```

```
/* ------------------ */
/* Close the postfile */
/* ------------------ */

postclose `p'

use `myfile', clear

      /* replace timeseries with <5 observations with missing */
      gen suppressed = obs <= 5
      replace obs = . if obs <= 5

      /* calculate RRs, 95% CIs and p-values */
      gen log_rr = log(obs / exp)
      gen se_rr =  1 / sqrt(obs)
      gen rr = exp(log_rr)
      gen rr_min = exp(log_rr - se_rr * invnormal(0.975))
      gen rr_max = exp(log_rr + se_rr * invnormal(0.975))
      gen z = log_rr/se_rr
      gen p = 2*normal(-abs(z))

      drop obs exp

save "results/total_suicides", replace
```

4. Country/area-within-country suicide data

Table 2: Details of country/area-within-country suicide data

Country	Area-within-country	Data custodian	Data sources[1]	Suicide data details	Availability of suicide data
High-income countries[2]					
Australia	New South Wales	New South Wales Ministry of Health	Data publicly available at https://www.health.nsw.gov.au/mentalhealth/resources/Pages/sums-report-jun-2021.aspx (accessed 13 August 2021)	Suicide data were sourced from the New South Wales Suicide Monitoring and Data Management System (NSWSMDMS). The NSWSMDMS draws on police and coronial data. Deaths are flagged as "suspected" suicides in a two-step process that involves automated screening and manual checking. The majority of these are ultimately recoded as "confirmed suicides". "Suspected suicides" and "confirmed suicides" (combined) were used as the unit of counting across the study period, removing the possible impact of changes in counts as investigations proceed.	Jan-19 to Jun-21
	Queensland	Australian Institute for Suicide Research and Prevention	Data provided directly on 30 September 2021	Suicide data came from the interim Queensland Suicide Register (iQSR). The iQSR relies on police reports of deaths prepared for coroners. iQSR coders classify the probability of the death being a suicide as "possible", "probable", or "beyond reasonable doubt". For all analyses, deaths classified as "probable" or "beyond reasonable doubt" are considered "suspected suicides". In the iQSR, these "suspected suicides" are not updated to "confirmed suicides", so using them as the unit of counting across the whole study timeframe ensured a like-with-like comparison between the pre-COVID and COVID periods. There is a high level of correspondence between the number of "suspected suicides" recorded in the iQSR and the official suicide figures reported by the Australian Bureau of Statistics	Jan-16 to Jun-21

				(ABS); for example, in 2016, there were 675 "suspected suicides" recorded in the iQSR and 688 reported for Queensland by the ABS.	
	Tasmania	Tasmanian Magistrates Court (Coronial Division)	Data provided directly on 10 September 2021	Suicide data were sourced from the Tasmanian Suicide Register (TSR). Upon receipt of notification of death (police reports and initial case notes), deaths occurring in circumstances consistent with suicide are initially classified as 'suspected' and flagged for follow-up when coronial investigations are completed. Following release of coronial findings, suspected suicides are reviewed and re-classified as 'intentional self-harm' deaths (i.e. a confirmed suicide) according to coronial statements. Cases where deceased intent is reported to be either 'unable to be determined' or 'not explicitly stated' may be included in the TSR, on a case-by-case basis, following consultation with the relevant coroner (where possible). Given the variable length of coronial investigations, the present study includes TSR data comprising either a substantial proportion of confirmed suicides (80%-100% confirmed for 2016-2019 data), or a mix of suspected and confirmed suicides (11%-59% confirmed for 2020-2021).	Jan-16 to Jun-21
	Victoria[5]	Coroners Court of Victoria	Data provided directly on 27 September 2021	Suicide data were sourced from the Victorian Suicide Register (VSR). Potential suicides are initially identified and included in the VSR through review of police reports and case notes for deaths reported to the Coroners Court of Victoria. Deceased intent is coded as "intentional self-harm" (if they occur in circumstances consistent with suicide), "unable to be determined" (if the available evidence is equivocal) or "still enquiring" (if there is insufficient evidence to date on deceased intent). Cases where the deceased intent is coded as "intentional self-harm" are deemed to be suicides. Intent coding is reviewed as the	Jan-16 to Jun-21

				coronial investigation continues and finalised once it is completed. In the current study, the deceased intent coding for older data (2016 to 2020), would have been reviewed at least once; these data can be considered to be highly reliable and likely to change only very slightly upon any further review. For the more recent data, particularly in deaths that occurred after June 2021, minimal review had occurred after initial coding; based on past experience, the suicide frequency during this latter period would be likely be revised down slightly (≈2-4%). There is a high degree of concordance between VSR data and official data from the Australian Bureau of Statistics (ABS); comparing ABS and VSR data for Victorian suicides between 2016 to 2020, the difference in aggregate frequencies was 0.3%.	
Austria	Whole country	Statistics Austria	Data provided directly on 24 September 2021	Suicide data were sourced from Statistics Austria, which hosts the official mortality statistics for Austria. Monthly suicides were provided based on ICD-10 codes. Data sources for the mortality statisitics are the central civil register (Zentrales Personenstandsregister) maintained by the Ministry of the Interior as well as assessments of medical examiners, pathologists, and coroners	Jan-16 to Dec-20
	Carinthia	Kärntner Suiziddatenbank, Amt der Kärntner Landesregierung	Data provided directly on 31 August 2021	Suicide data were sourced from the Carinthian Suicide Database (Kärntner Suiziddatenbank) which has existed since 2018. This database draws on police reports and case notes of the Red Cross (which is always involved in suicide cases) and both psychiatric departments of Carinthia. Each case is checked and rechecked and the overall figures are compared with relevant data from the Austrian suicide database, which is part of the official Statistik Austria. The data are timely; cases are up-to-date at the end of each month.	Jan-18 to Jun-21

	Tyrol	Tyrol Suicide Register	Data provided directly on 3 August 2021	Suicide data were sourced from the Tyrol Suicide Register (TSR). The TSR draws on data from police reports of deaths judged to be suicides by a public medical officer. These deaths were used as the unit of counting across the study period. There is no evidence that the assessment procedure changed after the beginning of the pandemic.	Jan-16 to Jun-21
Belgium	Whole country	Federal Police	Data provided directly on 10 September 2021	Suicide data were sourced from the Federal Police and are registered in the General National Database. They are based on the number of suicides for which an official report was drawn up by the Federal Police and not on the official registration of causes of death of all deceased residents in Belgium. Therefore, the data may be an underestimate of the actual number of suicides in Belgium.	Jan-17 to Dec-20
Canada	Alberta	Office of the Chief Medical Examiner	Data provided directly on 16 September 2021	The data source was records from the Office of the Chief Medical Examiner of Alberta. The standard for identifying a suicide was evidence of intent to die, including preparations for death inappropriate to or unexpected in the context of the decedent's life, expression of parting or the desire to die or an acknowledgment of impending death. The data is subject to change as open investigations are concluded by the Office of the Chief Medical Examiner.	Jan-16 to Jun-21
	British Columbia	British Columbia Coroners Service	Data provided directly on 19 September 2021	Suicide deaths were sourced from the British Columbia Coroners Services (BCCS) which operates in a live database environment. A finding of suicide is made on the balance of probabilities, in that it is more likely than not, that the death was the result of intentional self-harm. The coroner must consider the totality of the information and must find evidence (explicit, implicit, or both) that at the time of the injury the person intended to die, and that the person understand the consequences of his/her actions. The data are	Jan-16 to Dec-20

				preliminary and subject to change as coroners' investigations are finalised.	
	Manitoba	Office of the Chief Medical Examiner	Data provided directly on 21 September 2021	Data were sourced from the Office of the Chief Medical Examiner. The definition of suicide used was death resulting from a volitional act of the decedent with the knowledge that said act would be likely to result in self-harm. The standard of certifying a death as suicide was according to a high degree of probability throughout. The data provided should be considered final/not preliminary. The manner of death certification does not take place until the end of the investigation, so it is extremely unlikely that it would change without the appearance of new relevant information.	Jan-16 to Dec-20
	Nova Scotia	Nova Scotia Medical Examiner Service	Data provided directly on 8 September 2021	The data source was records from the Nova Scotia Medical Examiner Service. The longstanding practice is to classify deaths as suicide where the death is due to a volitional act on the part of the decedent that caused self-harm. The burden of proof required in an investigation is a more-likely-than-not standard. The data are preliminary and subject to change as coroners' investigations are finalised.	Jan-16 to Jun-21
	Ontario	Office of the Chief Coroner of Ontario	Data provided directly on 15 October 2021	The data source was records from the Office of the Chief Coroner of Ontario (Coroner's Information System). The manner for death was determined and entered into the Coroners Information System by an Investigating Coroner. The number of suicides which were listed as a preliminary or final manner of death were included in this study. The data provided is not entirely complete as some investigations were ongoing and/or a small percentage of cases may change from their preliminary manner of death classification to their final manner once the investigation and quality assurance measures are completed and cases are closed.	Jan-19 to Dec-20

	Saskatchewan	Saskatchewan Coroners Service	Data provided directly on 17 August 2021	The data source was records from the Saskatchewan Coroners Service which operates in a live database environment. A finding of suicide is made based on the balance of probabilities, i.e., what is more likely than not, that the person intended to end their own life. The evidence collected needs to support an injury or poisoning as a result of an intentional, self-inflicted act committed to do self-harm to end one's own life, and the indications of intent may include, but not be limited to, such things as: a suicide note, preparation for death, expressions of farewell or desire to die, expressions of hopelessness, previous suicide attempts, previous suicide threats, stressful events or significant losses, serious depression or mental disorder, etc. The suicide data provided is based on concluded, closed death investigation files so numbers may change as open case files are concluded following the research period.	Jan-16 to Jun-21
China[3]	Hong Kong Special Administrative Regions (SAR)	Coroner's Court of Hong Kong SAR Government	Data provided directly on 20 October 2021	The data were made available by the Coroner's Court of Hong Kong SAR Government. All unnatural causes of deaths (including suicides) need to be ascertained by the Coroner's Court which bases the cause of death on ICD-10 codes. The Coroner's Court needs to be satisfied beyond reason doubt that the death was self-inflicted based on information and evidence provided by the relevant authorities (e.g., police, medical and health services) and family members. It usually takes 3-6 months to reach a decision. However, longer decision times of more than a year are not uncommon (about 10%), based on historical data. Undercounts of suicide due to misclassifying suicide as deaths by underdetermined cause are small; these account for only about 5% of the total number of suicides. The standard of certifying a death as suicide is high and the	Jan-16 to Dec-20

				suicide data provided by the Coroner's Court is of high quality	
Croatia	Whole country	Ministry of the Interior Affairs	Data provided directly on 7 October 2021	Suicide data were based on mandatory death reports (certificates) that accompany all deaths. Causes of death are determined by medical doctors, immediately (and then also filed and submitted), or in case of any uncertainty, after autopsy. Data from both possible sources, death and autopsy reports, are submitted to the Ministry of the Interior Affairs and are then aggregated and statically analysed by the National Committed Suicide Registry by the Croatian institute of Public Health (and as such publicly published in their annual reports). For the study period, all the reports on death deemed to be suicides were completed and filed accordingly (fully closed) and they were used as the unit of counting across study period.	Jan-16 to Jun-21
Czech Republic	Whole country	Czech Statistical Office	Data provided directly on 24 September 2021	Suicide data are based on mandatory death reports. In any case of any death, a medical doctor is obliged to determine the cause of death immediately or after autopsy when the cause of death is not certain. After that, data are submitted to local Registry Offices and subsequently to the Czech Statistical Office, where they are aggregated, analysed and publicly released on a yearly basis.	Jan-16 to Dec-20
Denmark	Whole country	Danish Health Data Authority	Data provided directly on 24 September 2021	Information on suicide deaths is derived from the Cause of Death Register, which is compiled by the Danish Health Data Authority based on electronic death certificates. Regional country doctors fill in death certificates for unnatural deaths, such as suicide. The cause of death is recorded according to the ICD-10. The registration of suicide deaths in Denmark has been evaluated to be of a high level of accuracy.	Jan-16 to Dec-20
England and Wales[4]	Whole country	Office for National Statistics	Data publicly available at https://www.ons.gov.uk/peoplepo	In England and Wales, when somebody dies unexpectedly, a Coroner investigates the	Jan-16 to Dec-20

			pulationandcommunity/birthsdeathsandmarriages/deaths/adhocs/13762numberofsuicidesandagespecificsuicideratesbysexagegroupsandmonthforenglandandwales2015to2020occurrences (accessed 30 September 2021)	circumstances to establish the cause of death. The investigation, referred to as an "inquest", is a process that can take months, and in some cases, years. When an inquest has concluded, the death is officially registered by a service carried out by the Local Registration Service in partnership with the General Register Office (GRO). All information collected is forwarded to the Office for National Statistics (ONS) by the registrar. The ONS codes cause of death to International Classification of Diseases (ICD) and then assigns each death with an 'underlying cause', based on the information provided by the Coroner. In England and Wales, data on suicide concern all deaths that were assigned underlying cause of intentional self-harm (for those aged 10 years and above; ICD-10 codes X60-X84). We also include deaths caused by injury or poisoning of undetermined intent (for those aged 15 years and above; ICD-10 codes Y10-Y34), based on the assumption that the majority of these deaths will be suicide. This is referred to as the National Statistics definition of suicide. Figures are based on date of death occurrence. Due to registration delays, figures for 2020 in particular are likely to be underestimates of the eventual number of suicides occurring in this year. However, this was the most complete data that we had at the time of analysis.	
	Thames Valley (England)	Thames Valley Police	Data provided directly on 16 August 2021	The Thames Valley Real Time Suicide Surveillance (RTSS) data are primarily collected from police reports to the Coroners Services in Oxfordshire, Berkshire, Buckinghamshire and Milton Keynes. The data are provided either directly by the officers following attendance at the suspected suicide or subsequently by the coroners' teams themselves (especially in hospital-reported deaths post incident). An	Jan-17 to Jun-21

				audit is conducted approximately every two months in which RTSS data are compared with coroners' records, and there is minimal correction post inquest outcome.	
Estonia	Whole country	National Institute for Health Development	Data provided directly on 27 September 2021	Suicide data were sourced from the Estonian Causes of Death Registry managed by the National Institute for Health Development. Information is gathered from death certificates, which are filled in by medical doctors and forensic pathologists who have ascertained death. The ICD-10 is used to code the causes of death, and all deaths coded as X60 – X84 are considered to be suicides. All causes of death had been finalised in the study period. Deaths deemed to be suicides by this process were used as the unit of counting across the study period.	Jan-16 to Jun-21
Finland	Whole country	Forensic Medicine Unit, Finnish Institute for Health and Welfare	Data provided directly on 2 October 2021	Suicide data were sourced from the Forensic Medicine Unit of the Finnish Institute for Health and Welfare, the national legal authority in charge of forensic medicine guiding and monitoring the cause of death investigations in Finland. For the study period, the data consisted of all deaths from suicide (ICD-10 codes: X60-X84, Y870) verified by the official cause of death investigations, including forensic autopsy conducted by medical doctors as specialists in forensic medicine and with analysis of forensic toxicology samples. All these investigations were completed, filed accordingly (fully closed) and used as the unit of counting across the study period.	Jan-16 to Dec-20
Germany	Whole country	Statistisches Bundesamt	Data publicly available at https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Gesundheit/Todesursachen/Tabellen/suizide.html (accessed 27 September 2021)	Suicide data were sourced from Statistisches Bundesamt. Monthly suicides were counted based on ICD-10 code. The data for 2020 is provisional due to delayed registration or correction.	Jan-16 to Dec-20
	Cologne and Leverkusen	Police Headquarters Cologne	Data provided directly on 8 September 2021	Suicide data were sourced from the relevant police office, Police Headquarters Cologne. At	Jan-19 to Jun-21

				the request of the public prosecutor, police investigate all deaths for which there is doubt about the cause or suicide is suspected. The police office provides data on deaths that are then confirmed to be suicides to the local health department, which then passes them on to the State Statistical Offices. All of the cases in the current study were confirmed as suicide by the police, and no investigations were pending.	
	Frankfurt	Research Project FraPPE / Frankfurt Municipal Health Authority / University Hospital Frankfurt	Data provided directly on 29 September 2021	Suicide data were sourced from the Research Project Frappe, based on autopsy data which were obtained in the same way the whole study period so biases during the latter months are minimal.	Jul-18 to Dec-20
	Saxony	Saxon State Office of Criminal Investigation	Data provided directly on 8 October 2021	Suicide data were obtained from the Saxon State Office of Criminal Investigation. Violent and unnatural deaths and suspected suicides are always investigated by the police. In Saxony, these cases are recorded by the Saxony Police Information System (Polizeiliches Auskunftssystem Sachsen). In 99.5% of the reported cases in the present study, the investigation was completed and the cause of death was confirmed as suicide, the remaining 0.5% of cases are considered preliminary.	Jan-17 to Jun-21
Italy	Milan	Institute of Forensic Medicine, University of Milan	Data provided directly on 8 September 2021	Suicide data were extrapolated from the database of the Institute of Forensic Medicine of the University of Milan, where forensic and medical autopsies are routinely performed in Milan and its province (including Monza Brianza). This database is compiled directly by forensic doctors at the end of each autopsy, entering data about the deceased, as well as data relating to the event of death (e.g., the cause and manner of death, with specification of the means involved). This same information is also included in the ISTAT (National Institute of Statistics) cause of death report form, contributing to national statistics. The	Jan-16 to Jun-21

				diagnosis of each cause of death is the result of the integration of autopsy, laboratory and investigative data.	
	Udine and Pordenone	Regional Social and Health Information System (SISSR) of the Friuli Venezia Guilia (FVG) Region	Data provided directly on 23 August 2021	Suicide data were obtained from the Regional Social and Health Information System (SISSR) of the Friuli Venezia Giulia (FVG) Region, available for consultation at the Epidemiological Service, Healthcare Agency for Health Coordination. They were identified through the Death Register of Region FVG, which uses ICD-9 codes E95*and E98* for intentional self-harm and events of undetermined intent. The Death Register collects data on cause of death based on death certificates, as provided by the National Institute of Statistics (Istat). The certificates are completed by a physician, usually a coroner. Deaths due to undetermined intent are rare (approximately 10%), and they were deemed to be "suspected suicides" for the purpose of this study. These data are used for regional mortality statistics and were registered in the same way for the full study period. The south-eastern area of the region, corresponding to Trieste and Gorizia areas, was excluded from the analysis, due to a delay in mortality data registration.	Jan-16 to Jun-21
Japan	Whole country	National Police Agency	Data provided directly on 17 August 2021	Suicide data were sourced from the National Police Agency (NPA). The NPA suicide statistics are derived from police investigations of suicide cases. All suspected suicides are investigated by the police, and the NPA records all deaths that are deemed to be suicides following this investigation. The data used in this study are provisional data, but the discrepancy between the provisional and the finalised data (released in March the following year) has been ≈1% in the past three years. The NPA data are closely correlated with those tabulated by the Ministry of Health, Labour,	Jan-16 to Jun-21

				and Welfare, which are based on death certificates (r=0.995 for suicides occurring between 1978 and 2018).	
Netherlands	Whole country	Statistics Netherlands	Data publicly available at https://www.cbs.nl/nl-nl/maatwerk/2021/26/kenmerken-van-zelfdodingen-van-2019-t-m-2021-kwartaal-1 (accessed 29 September 2021)	Suicide data are based on the cause of death statistics, sourced from Statistics Netherlands. This is a legal registration of causes of death of all deceased residents of the Netherlands. A cause of death certificate is completed by a medical doctor for every deceased person, and in case of uncertainty about a (un)natural cause of death, by a coroner. This statement of cause of death is sent to and processed at Statistics Netherlands. The data up to and including 2019 is final. The data in 2020 and 2021 is preliminary. However, minimal numbers have been added in previous years when data was still preliminary, so no major adjustments are expected.	Jan-16 to Mar-21
New Zealand	Whole country	Coronial Services of New Zealand	Data provided directly on 9 November 2021	Suicide data were sourced from Coronial Services. These data are published as provisional and are a count of deaths that the police have notified the Coroner as being "suspected suicides". These deaths are subsequently investigated by the Coroner, and those with a finding/verdict of suicide are later published by the New Zealand Ministry of Health, as "confirmed deaths by suicide", after a delay of several years due to delays in Coronial inquests. The provisional Coronial Services data were used across the full study period.	Jan-16 to Jun-21
Norway	Whole country	National Institute of Public Health	Data provided directly on 24 August 2021	Suicide data were sourced from the published statistics from the Norwegian Causes of Death Registry, administered by the National Institute of Public Health. Cause of death certificates are filled by medical doctors, taking into account supplemental information from autopsies. The autopsy rate is approximately 80% for deaths by suicide. The ICD-10 is used to code the underlying cause of death, and all deaths	Jan-16 to Dec-20

				coded as X60-X84 and Y87.0 are considered to be suicides.	
Poland	Whole country	Working Group on Prevention of Suicide and Depression at Public Health Council Ministry of Health	Data provided directly on 30 September 2021	Suicide data were provided by the Working Group on Prevention of Suicide and Depression at Public Health Council Ministry of Health. These data are gathered by the National Police Headquarters on the basis of police reports. (In Poland, suicide data are also gathered by Statistics Poland). Since 2013, police have entered data on given suicide cases into a database (called "KSIP-10 reporting suicide/suicidal behaviour" since 2017), immediately after it has been determined that a suicide took place. Data can be modified for up to one month, enabling modifications to the record in the event that additional suicides are identified or deaths that were previously identified as suicides are no longer thought to be so. After one month, the system "freezes" the data and no further updates can be made. These data were used as the unit of counting across the study period. In Poland	Jan-16 to Jun-21
Scotland	Whole country	National Records of Scotland	Data provided directly on 29 September 2021	Suicide data were based on death registration data. Death registration is a legal requirement so the data are very comprehensive. The Medical Certificate of Cause of Death (MCCD) is completed by the certifying doctor and causes of death are coded by NRS using ICD-10. All deaths which are considered to be possible suicides are referred to the Crown Office and Procurator Fiscal Service for investigation and it is the judgement of the Procurator Fiscal on the nature of death (accident, assault, intentional self-harm, undetermined intent) which determines whether the death is counted as a suicide. All deaths in Scotland are registered within 8 days of occurrence – even if referred to the Procurator Fiscal so there is minimal lag between occurrence and registration date.	Jan-16 to Dec-20

				The definition of suicide used in Scotland includes death due to intentional self-harm and undetermined intent. Only data on deaths from intentional self-harm have been provided for this study for comparability with other countries' data.	
Slovenia	Whole country	National Institute of Public Health	Data provided directly on 24 September 2021	Suicide data were gathered from the National Mortality Database. The database registers all deaths nationwide and deaths of Slovenian citizens abroad, and contains information from the death certificate. Among others, the certificate includes causes of death, which are determined by the medical examiner/coroner immediately after visiting the death scene or in case of uncertainty upon clinical autopsy or in case of possible criminal act upon forensic autopsy. To exclude a violent death caused by others, the process of determining a death as a suicide is marked by close collaboration of the medical examiner and a forensic specialist. Upon entry of all annual deaths the database is sent to the Statistical Office of Republic of Slovenia to exclude deaths of individuals not having a permanent or temporary residence in Slovenia. After the database is cleaned, the official statistics are made public.	Jan-16 to Dec-20
South Korea	Whole country	Statistics Korea	Data publicly available at https://kosis.kr/statisticsList/statisticsListIndex.do?menuId=M_01_01&vwcd=MT_ZTITLE&parmTabId=M_01_01&outLink=Y&entrType= (accessed 28 September 2021)	Suicide data were taken from figures published by Statistics Korea. Data for January 2016 to December 2019 are finalised figures while data for January 2020 to June 2021 are preliminary at the time of data extraction. Statistics Korea releases the provisional numbers within about two months, and then releases the finalised figures in September of the following year. In terms of counting provisional cases, a death was classified as a suicide if either the death certificate or the police report indicated that it was a suicide. The cases reported as being due to different causes of death are comprehensively investigated to and are	Jan-16 to Jun-21

				reflected only in the finalised numbers. The finalised figures may be 3-7% higher than the provisional counts, based on 2018 and 2019 data.	
Sweden	Whole country	National Board of Health and Welfare	Data provided directly on 24 September 2021	Suicide data are derived from the Cause of Death register held by the National Board of Health and Welfare. The information on causes of death builds on death causes indicated by the physician responsible for the death certificate. The cause of death is based on ICD-10. Only deceased individuals who are registered in Sweden at the time of their death are included, irrespective if they died in Sweden or abroad. When the intention to commit suicide is obvious, the diagnostic codes are used for intentional self-harm (X60– X84). When the intention of suicide is uncertain, diagnostic codes are used for events of undetermined intent (Y10 – Y34). The register has a high quality: only for 1-2% of all deaths, information on the cause is missing.	Jan-16 to Dec-20
Taiwan	Whole country	Ministry of Health and Welfare	Data provided directly on 30 September 2021	Suicide data were extracted from the *Annual Report on the Causes of Death Statistics*, which can be accessed from the Taiwan Ministry of Health and Welfare website. Only certified suicides (ICD-10 X60-X84 and Y87.0) were included in the *Report*.	Jan-15 to Dec-20
United States	Whole country	Centers for Disease Control and Prevention (CDC) Wide-ranging Online Data for Epidemiologic Research (WONDER) and CDC	2016 to 2019: Data publicly available at https://wonder.cdc.gov/Deaths-by-Underlying-Cause.html (accessed 13 August 2021) 2020 and 2021: Data publicly available at https://data.cdc.gov/NCHS/Monthly-Provisional-Counts-of-Deaths-by-Select-Cau/9dzk-mvmi (accessed 13 August 2021)	Data for 2016 to 2019 were obtained from CDC WONDER, which were finalised counts. Data for 2000 and 2021 were extracted the CDC, which were preliminary data sourced from National Center for Health Statistics. Suicides included in these datasets are tabulated by underlying cause of death ICD-10 codes.	Jan-16 to Jan-21

	California	California Department of Public Health	Data publicly available at https://data.chhs.ca.gov/dataset/statewide-death-profiles (accessed 21 August 2021)	Suicide data were sourced from the California Department of Public Health. The information was derived from collating records available from the California Electronic Death Registration System where the cause of death was coded as X60-X84 in ICD-10.	Jan-16 to Jun-21
	Illinois (Cook County)	Cook County Medical Examiner Case Archive	Data publicly available at https://datacatalog.cookcountyil.gov/Public-Safety/Medical-Examiner-Case-Archive-Manner-of-Death-Char/jjtx-2ras (accessed 29 October 2021)	Suicide data were sourced from the Medical Examiner Case Archive (MECA) which collates suicide cases that occur in Cook County under the Medical Examiner's jurisdiction. The total suicides according to MECA will differ from the total provided in other statistical collections in that not all suicides that occur in Cook County are reported to the Medical Examiner or fall under their jurisdiction. These data were used consistently across the study period, however.	Jan-16 to Jun-21
	Massachusetts	Massachusetts Department of Health	Data provided directly on 22 October 2021	Suicide data were sourced from the Massachusetts Department of Health Registry of Vital Statistics which reports the total number of suicides (ICD 10 X60-X84) by date of occurrence, as determined by local Medical Examiners.	Jan-16 to Dec-20
	Wisconsin (Milwaukee, Jefferson, Kenosha, Racine and Ozaukee counties)	Milwaukee County Medical Examiner Public Access	Data publicly available at https://county.milwaukee.gov/EN/Medical-Examiner/Public-Data (accessed 23 August 2021)	Suicide data were sourced from the Milwaukee County Medical Examiner. The data contains information about suicide that occur in Milwaukee and neighbouring counties that are under the Medical Examiner's jurisdiction. The data is updated in real time.	Jan-16 to Jun-21
	New Jersey	New Jersey Department of Health	Data publicly available at https://www-doh.state.nj.us/doh-shad/topic/Mortality.html (accessed 13 August 2021)	Suicide data were sourced from the New Jersey Death Certificate database, which draws on data from death certificates. New Jersey law requires death certificates to be completed by the proper authority (e.g., hospital personnel, medical doctors, medical examiners, funeral directors) and filed promptly. These certificates are submitted to the office of the State Registrar, where they are recorded and filed permanently. Deaths deemed to be suicides according to this death certificate data were used as the unit of	Jan-16 to Jun-21

				counting across the study period. Data for 2016 to 2019 are final and data for 2020 and 2021 are provisional.	
	Pennsylvania	CDC WONDER and Pennsylvania Department of Health	2016 to 2019: Data publicly available at https://wonder.cdc.gov/Deaths-by-Underlying-Cause.html (accessed 13 August 2021) 2020 to 2021: Data publicly available at https://www.health.pa.gov/topics/HealthStatistics/VitalStatistics/DeathStatistics/Pages/death-statistics.aspx (accessed 13 August 2021)	Data for 2016 to 2019 were obtained from CDC WONDER, which were finalised counts. Data for 2020 and 2021 were extracted the Pennsylvania Department of Health, which were preliminary data sourced from Pennsylvania Death Certificate Dataset.	Jan-16 to Jun-21
	Puerto Rico[5]	Forensic Sciences Institute – Puerto Rico	Data provided directly on 26 October 2021	Suicide data were sourced from the Forensic Sciences Institute in Puerto Rico. The Institute of Forensic Sciences is responsible for the investigation of cause, manner, and circumstances of death, including violent deaths such as suicide and homicide. The data obtained are collated from FileMaker Instant Web Publishing and subsequently shared with the Puerto Rico Department of Health's Commission on Suicide Prevention via Excel spreadsheets. The spreadsheets' contents include the forensic pathologist's final say on cause and manner of death, as well as, when available, information regarding medical history, history of previous known suicide attempts, and precipitant factors for the suicide death. The data are constantly updated as cases are closed, therefore, the data provided are provisional.	Jan-16 to Jun-21
	Texas (Denton, Johnson, Parker, Tarrant Counties)	Medical Examiners Case Records	Data publicly available at Source: https://mepublic.tarrantcounty.com/ (accessed 29 September 2021)	Suicide counts were collated from individual reports released from Medical Examiners Case Records, spanning four counties in Texas– Denton, Johnson, Parker, Tarrant Counties.	Jan-16 to Jun-21

				This is updated in daily basis. Individual cases in which the manner of death was coded as "suicide" were selected and aggregated.	
Upper-middle-income countries[2]					
Brazil	Whole country	Department of Health Analysis and Surveillance of Noncommunicable Diseases (DASNT), Health Surveillance Secretariat	Data provided directly on 11 August 2021	In Brazil, data were taken from the Department of Health Analysis and Surveillance of Noncommunicable Diseases (DASNT) of the Health Surveillance Secretariat, in the ICD-10 Mortality Monitoring Panel, based on death certificates. As in other countries, death certificates use the International Statistical Classification of Diseases (ICD) table as a reference to determine the cause of death. In the ICD-10, suicide is represented by codes X60-X84, which designate intentional self-harm. The death certificates are completed by a physician, usually a coroner. We have no idea how many deaths are not counted as suicides. Whenever a “suspicious death” occurs, it goes to police investigation, but the numbers we have are based just on the death certificate, which is mandatory for burial, which takes place on average 14-48 hours after death. Often the investigation does not come to an end and the death certificate is not updated. Data from 2020 and 2021 are preliminary, data from 2012 to 2019 are final.	Jan-12 to May-21
Costa Rica	Whole country	Instituto Nacional De Estadística Y Censos	Data publicly available at Source: http://sistemas.inec.cr:8080/bininec/RpWebEngine.exe/Portal?BASE=VITDEF&lang=esp (accessed 13 August 2021)	Suicide date were tabulated from Instituto Nacional De Estadística Y Censos. ICD-10 2008 edition was applied for 2000-2016 period in the system. ICD-10 2015 edition was used from 2017 onwards. Data for 2020 are preliminary and data for 2016-2019 are final.	Jan-16 to Dec-20
Ecuador	Whole country	Government Ministry (Police Reports)	Data provided directly on 27 August 2021	Suicide data were sourced from police reports (Dirección Nacional de Delitos contra la Vida, Muertes Violentas, Desapariciones, Extorsión y Secuestro (DINASED) de la Policía Nacional, Ministerio de Gobierno) for the whole study period. These reports capture 80-95% of all	Jan-16 to Jun-21

				suicides that are represented in the official statistics of the National Institution of Statistics and Information (INEC), because some information is not collected by the police (e.g., cases where the person makes a suicide attempt and subsequently dies in hospital). However, the consistent use of police data across the study period means that like-with-like comparisons were made. In addition, the distribution of suicide methods was similar across the whole period, instilling further confidence that biases were not introduced in the latter period.	
Mexico	Whole country	Mexican National Statistical Bureau (INEGI)	Data provided directly on 11 August 2021 Data also publicly available at http://www.dgis.salud.gob.mx/contenidos/basesdedatos/BD_Cubos_gobmx.html	Data for 2016 to 2020 were obtained from Mexican National Statistical Bureau (INEGI). Data were final mortality data from different causes. Suicides included in these datasets were tabulated by underlying cause of death ICD-10 codes.	Jan-16 to Dec-20
Peru	Whole country	National Death Registry Information System	Data publicly available at https://www.datosabiertos.gob.pe/dataset/informaci%C3%B3n-de-fallecidos-del-sistema-inform%C3%A1tico-nacional-de-defunciones-sinadef-ministerio (accessed 4 September 2021)	Data were sourced from the National Death Registry Information System, which is the computer application that generates death certificates and aggregates these into a statistical report. Data are updated on a daily basis.	Jan-17 to Jun-21
Russia	Saint Petersburg	Saint Petersburg City Bureau of Forensic Medical Examinations	Data provided directly on 31 August 2021	Suicide data originate from registries of the Saint Petersburg City Bureau of Forensic Medical Examinations. Initial data are coded according to ICD 10. These data are referred as “preliminary” and after confirmation from police authorities until first quarter of 2020 were transferred into the open access system of the demographic statistics of Saint Petersburg. This practice has changed recently, however according to previous years of observation, any discrepancy between	Jan-16 to Dec-20

				"preliminary" and "confirmed" suicides fall within the range 2-4% from initial numbers.	
	Udmurtia	Regional Mortality Database	Data provided directly on 20 August 2021	Data are collected from the regional mortality database. Every case of death is registered in this database and ICD-10 classification is used. It is updated on monthly basis. Each medical organization of Udmurt Republic has access to this database.	Jan-16 to Jun-21
Lower-middle-income countries[2]					
India	Bihar state (rural)	Public Health Foundation of India	Data provided directly on 17 August 2021	Data were sourced from a population-based representative household survey in rural Bihar. Households in the sampled clusters covering a population of 283,758 were enumerated to identify deaths across all ages between January 2018 and December 2020. Verbal autopsy interviews were conducted for all deaths using the Population Health Metrics Research Consortium tool and cause of death assigned using the SmartVA.	Jan-18 to Jan-21
	New Delhi (2 districts)	Department of Forensic Medicine, All India Institute of Medical Sciences (AIIMS)	Data provided directly on 1 September 2021	Suicide data were sourced from medicolegal autopsy records of the Department of Forensic Medicine, AIIMS, New Delhi which is responsible for autopsies of all suicidal deaths for the jurisdictions of the south and south-east districts of Delhi.	Jan-16 to Jun-21
	Uttar Pradesh state (5 districts)	Public Health Foundation of India	Data provided directly on 17 August 2021	Data were sourced from a population-based representative household survey in 5 districts in Uttar Pradesh. Households in the sample clusters covering a population of 196,235 were enumerated to identify deaths across all ages between January 2018 and December 2020. Verbal autopsy interviews were conducted for all deaths using the Population Health Metrics Research Consortium tool and cause of death assigned using the SmartVA.	Jan-18 to Dec-20
Iran	Kerman Province	Iranian Forensic Medicine Organization (IFMO), Kerman Branch	Data provided directly on 24 August 2021	The Iranian Forensic Medicine Organization (IFMO), which is associated to the Judicial Authority in Iran, is responsible for collecting data related to all suicide cases across thirty-one provinces of Iran. All IFMO gathered	Jan-17 to Mar-21

				suicide cases are certified by autopsy and in the present study only IFMO data related to Kerman Province Branch are presented.	
Ukraine	Odessa	Odessa Regional Bureau of Forensic Medical Examination	Data provided directly on 4 October 2021	Data were collated by the Department of Forensic Medical Examination of Corpses of the Odessa Regional Bureau of Forensic Medical Examination.	Jan-16 to Dec-20

1. We sourced data until our cut-off date of 31 October 2021. We only included beyond this point if we were already in the process of sourcing them.
2. Income level based on World Bank Classification: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.
3. China is an upper-middle-income-country but Hong Kong SAR is listed as a high-income economy by the World Bank.
4. Data from England and Wales were provided to us in a combined form, so for the purposes of the analyses they were treated as one country.
5. Unincorporated territory of the United States.

5. Summary results: Countries, first nine months of the pandemic (1 April 2020 to 31 December 2020)

Table 3: Countries, first nine months of the pandemic: frequencies and percentages of the strength of the evidence against the null hypothesis

Strength of evidence	All suicides	Males	Females	<20 yrs	20-39 yrs	40-59 yrs	≥60 yrs	Males < 20 yrs	Males 20-39 yrs	Males 40-59 yrs	Males ≥60 yrs	Females < 20 yrs	Females 20-39 yrs	Females 40-59 yrs	Females ≥60 yrs
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
RR < 1, strong (p ≤ 0.001)	7 (28%)	6 (30%)	6 (30%)	1 (6%)	4 (24%)	3 (18%)	2 (12%)	3 (20%)	3 (18%)	4 (24%)	1 (6%)	2 (14%)	4 (27%)	3 (18%)	0 (0%)
RR < 1, moderate (0.001 < p ≤ 0.01)	2 (8%)	0 (0%)	1 (5%)	1 (6%)	0 (0%)	2 (12%)	0 (0%)	0 (0%)	1 (6%)	1 (6%)	1 (6%)	0 (0%)	0 (0%)	3 (18%)	1 (6%)
RR < 1, weak (0.01 < p ≤ 0.05)	2 (8%)	2 (10%)	0 (0%)	2 (12%)	1 (6%)	1 (6%)	2 (12%)	0 (0%)	1 (6%)	1 (6%)	2 (12%)	1 (7%)	3 (20%)	0 (0%)	1 (6%)
RR = 1, no evidence (p > 0.05)	11 (44%)	10 (50%)	10 (50%)	12 (71%)	10 (59%)	10 (59%)	9 (53%)	11 (73%)	10 (59%)	10 (59%)	10 (59%)	7 (50%)	6 (40%)	7 (41%)	10 (62%)
RR > 1, weak (0.01 < p ≤ 0.05)	1 (4%)	0 (0%)	2 (10%)	0 (0%)	1 (6%)	0 (0%)	1 (6%)	0 (0%)	1 (6%)	0 (0%)	1 (6%)	2 (14%)	0 (0%)	0 (0%)	1 (6%)
RR > 1, moderate (0.001 < p ≤ 0.01)	1 (4%)	1 (5%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (7%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (7%)	1 (6%)	1 (6%)
RR > 1, strong (p ≤ 0.001)	1 (4%)	1 (5%)	1 (5%)	1 (6%)	1 (6%)	1 (6%)	3 (18%)	0 (0%)	1 (6%)	1 (6%)	2 (12%)	2 (14%)	1 (7%)	3 (18%)	2 (12%)

6. Summary results: Countries, first 10-15 months of the pandemic 1 April 2020 to the latest month for which data were available, from at least 31 January 2021 and potentially up until 30 June 2021)

Table 4: Countries, first 10-15 months of the pandemic: frequencies and percentages of the strength of the evidence against the null hypothesis

Strength of evidence	All suicides	Males	Females	<20 yrs	20-39 yrs	40-59 yrs	≥60 yrs	Males < 20 yrs	Males 20-39 yrs	Males 40-59 yrs	Males ≥60 yrs	Females < 20 yrs	Females 20-39 yrs	Females 40-59 yrs	Females ≥60 yrs
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
RR < 1, strong (p ≤ 0.001)	5 (45%)	3 (30%)	4 (40%)	1 (12%)	1 (12%)	2 (25%)	1 (12%)	1 (12%)	1 (12%)	4 (50%)	2 (25%)	2 (25%)	2 (25%)	3 (38%)	1 (12%)
RR < 1, moderate (0.001 < p ≤ 0.01)	0 (0%)	1 (10%)	0 (0%)	1 (12%)	0 (0%)	1 (12%)	1 (12%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (12%)	0 (0%)	0 (0%)	0 (0%)
RR < 1, weak (0.01 < p ≤ 0.05)	0 (0%)	1 (10%)	0 (0%)	0 (0%)	1 (12%)	0 (0%)	0 (0%)	1 (12%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (12%)	0 (0%)	1 (12%)
RR = 1, no evidence (p > 0.05)	5 (45%)	4 (40%)	3 (30%)	5 (62%)	4 (50%)	5 (62%)	5 (62%)	5 (62%)	6 (75%)	4 (50%)	5 (62%)	1 (12%)	3 (38%)	2 (25%)	5 (62%)
RR > 1, weak (0.01 < p ≤ 0.05)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (12%)	0 (0%)	0 (0%)	0 (0%)
RR > 1, moderate (0.001 < p ≤ 0.01)	0 (0%)	1 (10%)	0 (0%)	0 (0%)	1 (12%)	0 (0%)	0 (0%)	1 (12%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
RR > 1, strong (p ≤ 0.001)	1 (9%)	0 (0%)	3 (30%)	1 (12%)	1 (12%)	0 (0%)	1 (12%)	0 (0%)	1 (12%)	0 (0%)	1 (12%)	3 (38%)	2 (25%)	3 (38%)	1 (12%)

7. Summary results: Areas-within-countries, first nine months of the pandemic (1 April 2020 to 31 December 2020)

Table 5: Areas-within-countries, first nine months of the pandemic: frequencies and percentages of the strength of the evidence against the null hypothesis

Strength of evidence	All suicides	Males	Females	<20 yrs	20-39 yrs	40-59 yrs	≥60 yrs	Males < 20 yrs	Males 20-39 yrs	Males 40-59 yrs	Males ≥60 yrs	Females < 20 yrs	Females 20-39 yrs	Females 40-59 yrs	Females ≥60 yrs
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
RR < 1, strong (p ≤ 0.001)	6 (18%)	3 (11%)	1 (4%)	1 (7%)	0 (0%)	3 (12%)	0 (0%)	1 (8%)	0 (0%)	1 (5%)	0 (0%)	1 (11%)	1 (8%)	0 (0%)	0 (0%)
RR < 1, moderate (0.001 < p ≤ 0.01)	2 (6%)	1 (4%)	4 (15%)	0 (0%)	1 (4%)	4 (17%)	1 (4%)	1 (8%)	0 (0%)	3 (14%)	0 (0%)	0 (0%)	0 (0%)	1 (6%)	1 (7%)
RR < 1, weak (0.01 < p ≤ 0.05)	4 (12%)	2 (7%)	2 (8%)	1 (7%)	2 (8%)	1 (4%)	0 (0%)	0 (0%)	2 (10%)	0 (0%)	1 (5%)	0 (0%)	2 (17%)	4 (22%)	1 (7%)
RR = 1, no evidence (p > 0.05)	15 (45%)	16 (59%)	16 (62%)	9 (60%)	19 (79%)	13 (54%)	17 (71%)	6 (50%)	15 (71%)	17 (77%)	17 (77%)	6 (67%)	7 (58%)	11 (61%)	11 (73%)
RR > 1, weak (0.01 < p ≤ 0.05)	0 (0%)	1 (4%)	1 (4%)	3 (20%)	0 (0%)	1 (4%)	0 (0%)	1 (8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
RR > 1, moderate (0.001 < p ≤ 0.01)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (12%)	1 (8%)	0 (0%)	0 (0%)	1 (5%)	1 (11%)	1 (8%)	1 (6%)	1 (7%)
RR > 1, strong (p ≤ 0.001)	6 (18%)	4 (15%)	2 (8%)	1 (7%)	2 (8%)	2 (8%)	3 (12%)	2 (17%)	4 (19%)	1 (5%)	3 (14%)	1 (11%)	1 (8%)	1 (6%)	1 (7%)

8. Summary results: Areas-within-countries, first 10-15 months of the pandemic 1 April 2020 to the latest month for which data were available, from at least 31 January 2021 and potentially up until 30 June 2021)

Table 6: Areas-within-countries, first 10-15 months of the pandemic: frequencies and percentages of the strength of the evidence against the null hypothesis

Strength of evidence	All suicides	Males	Females	<20 yrs	20-39 yrs	40-59 yrs	≥60 yrs	Males < 20 yrs	Males 20-39 yrs	Males 40-59 yrs	Males ≥60 yrs	Females < 20 yrs	Females 20-39 yrs	Females 40-59 yrs	Females ≥60 yrs
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
RR < 1, strong ($p \leq 0.001$)	6 (25%)	4 (20%)	1 (5%)	2 (17%)	0 (0%)	3 (17%)	1 (6%)	2 (22%)	0 (0%)	4 (25%)	1 (6%)	1 (11%)	1 (8%)	1 (7%)	1 (7%)
RR < 1, moderate ($0.001 < p \leq 0.01$)	2 (8%)	0 (0%)	0 (0%)	0 (0%)	1 (6%)	2 (11%)	2 (11%)	0 (0%)	2 (12%)	0 (0%)	1 (6%)	0 (0%)	1 (8%)	1 (7%)	1 (7%)
RR < 1, weak ($0.01 < p \leq 0.05$)	1 (4%)	1 (5%)	3 (15%)	0 (0%)	3 (17%)	2 (11%)	1 (6%)	1 (11%)	1 (6%)	3 (19%)	1 (6%)	1 (11%)	0 (0%)	2 (14%)	0 (0%)
RR = 1, no evidence ($p > 0.05$)	8 (33%)	9 (45%)	13 (65%)	6 (50%)	10 (56%)	8 (44%)	9 (50%)	3 (33%)	9 (56%)	8 (50%)	10 (62%)	5 (56%)	9 (69%)	7 (50%)	10 (67%)
RR > 1, weak ($0.01 < p \leq 0.05$)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (11%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (11%)	0 (0%)	1 (7%)	1 (7%)
RR > 1, moderate ($0.001 < p \leq 0.01$)	2 (8%)	0 (0%)	1 (5%)	2 (17%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (8%)	1 (7%)	1 (7%)
RR > 1, strong ($p \leq 0.001$)	5 (21%)	6 (30%)	2 (10%)	2 (17%)	2 (11%)	3 (17%)	5 (28%)	3 (33%)	4 (25%)	1 (6%)	3 (19%)	1 (11%)	1 (8%)	1 (7%)	1 (7%)

9. Full results: Countries, first nine months of the pandemic (1 April 2020 to 31 December 2020)

Table 7: Countries, first nine months of the pandemic: All suicides, males, females

	All suicides		Males		Females	
	RR (95% CI)	**P-value**	**RR (95% CI)**	**P-value**	**RR (95% CI)**	**P-value**
USA	0.96 (0.95 to 0.97)	<0.001				
South Korea	0.91 (0.89 to 0.93)	<0.001	0.91 (0.89 to 0.93)	<0.001	0.86 (0.83 to 0.89)	<0.001
Brazil	0.88 (0.86 to 0.90)	<0.001	0.88 (0.86 to 0.90)	<0.001	0.87 (0.83 to 0.91)	<0.001
England and Wales	0.77 (0.74 to 0.79)	<0.001	0.76 (0.73 to 0.80)	<0.001	0.77 (0.72 to 0.83)	<0.001
Mexico	0.93 (0.91 to 0.96)	<0.001	0.93 (0.91 to 0.96)	<0.001	0.95 (0.89 to 1.01)	0.086
Sweden	0.84 (0.79 to 0.90)	<0.001	0.97 (0.90 to 1.05)	0.502	0.77 (0.68 to 0.88)	<0.001
New Zealand	0.82 (0.75 to 0.91)	<0.001	0.87 (0.78 to 0.97)	0.011	0.71 (0.58 to 0.86)	<0.001
Norway	0.91 (0.83 to 1.00)	0.041				
Peru	0.90 (0.82 to 0.99)	0.032	0.98 (0.88 to 1.09)	0.704	0.67 (0.56 to 0.80)	<0.001
Scotland	1.01 (0.93 to 1.10)	0.849	0.98 (0.89 to 1.08)	0.674	0.75 (0.63 to 0.89)	0.001
Ecuador	0.91 (0.85 to 0.97)	0.003	0.87 (0.81 to 0.94)	<0.001	0.98 (0.85 to 1.14)	0.821
Costa Rica	0.83 (0.73 to 0.94)	0.003	0.75 (0.65 to 0.87)	<0.001	1.22 (0.95 to 1.57)	0.120
Finland	0.93 (0.86 to 1.02)	0.115	0.95 (0.86 to 1.05)	0.348	0.87 (0.73 to 1.04)	0.123
Taiwan	1.03 (0.99 to 1.07)	0.146	0.97 (0.92 to 1.01)	0.141	1.05 (0.99 to 1.12)	0.130
Netherlands	1.02 (0.96 to 1.07)	0.518	1.06 (0.99 to 1.13)	0.087	0.99 (0.90 to 1.09)	0.815
Estonia	1.08 (0.93 to 1.26)	0.296	1.09 (0.92 to 1.30)	0.308	1.13 (0.82 to 1.55)	0.469
Slovenia	0.90 (0.80 to 1.01)	0.085	0.90 (0.79 to 1.03)	0.111	0.92 (0.71 to 1.20)	0.547
Poland	1.01 (0.98 to 1.04)	0.436	1.00 (0.96 to 1.03)	0.847	1.11 (1.02 to 1.20)	0.010
Germany	0.99 (0.96 to 1.01)	0.211				
Denmark	0.95 (0.86 to 1.04)	0.273				
Belgium	1.03 (0.97 to 1.10)	0.338				
Croatia	1.01 (0.92 to 1.11)	0.793	1.04 (0.94 to 1.16)	0.465	1.31 (1.07 to 1.62)	0.010
Czech Republic	1.09 (1.02 to 1.16)	0.011	1.11 (1.04 to 1.20)	0.003	0.95 (0.82 to 1.11)	0.532
Austria	1.10 (1.03 to 1.18)	0.005	1.16 (1.08 to 1.25)	<0.001	1.00 (0.87 to 1.17)	0.953
Japan	1.05 (1.03 to 1.07)	<0.001	0.98 (0.96 to 1.00)	0.021	1.24 (1.20 to 1.27)	<0.001

Table 8: Countries, first nine months of the pandemic: <20 yrs, 20-39 yrs, 40-59 yrs, ≥60 yrs

	<20 yrs		20-39 yrs		40-59 yrs		≥60 yrs	
	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value
USA								
South Korea								
Brazil	0.75 (0.70 to 0.81)	<0.001	0.83 (0.80 to 0.86)	<0.001	0.94 (0.90 to 0.97)	<0.001	0.91 (0.87 to 0.95)	<0.001
England and Wales	0.77 (0.62 to 0.96)	0.018	0.68 (0.63 to 0.72)	<0.001	0.76 (0.72 to 0.80)	<0.001	0.87 (0.81 to 0.94)	<0.001
Mexico	0.91 (0.85 to 0.97)	0.005	0.90 (0.87 to 0.93)	<0.001	0.91 (0.87 to 0.96)	<0.001	1.27 (1.18 to 1.38)	<0.001
Sweden	1.28 (0.92 to 1.79)	0.139	0.76 (0.67 to 0.86)	<0.001	0.84 (0.74 to 0.95)	0.004	1.11 (0.99 to 1.25)	0.066
New Zealand	0.73 (0.55 to 0.98)	0.038	0.92 (0.80 to 1.07)	0.274	0.77 (0.65 to 0.92)	0.003	0.74 (0.58 to 0.93)	0.011
Norway								
Peru	0.95 (0.79 to 1.13)	0.539	0.91 (0.77 to 1.07)	0.258	0.79 (0.65 to 0.97)	0.021	1.01 (0.81 to 1.26)	0.949
Scotland	0.90 (0.61 to 1.32)	0.597	0.96 (0.84 to 1.09)	0.506	1.08 (0.94 to 1.23)	0.263	0.97 (0.77 to 1.23)	0.805
Ecuador	1.05 (0.90 to 1.22)	0.527	0.88 (0.79 to 0.98)	0.015	0.94 (0.82 to 1.08)	0.389	1.22 (1.04 to 1.42)	0.015
Costa Rica	0.88 (0.60 to 1.31)	0.530	0.86 (0.72 to 1.04)	0.116	0.82 (0.66 to 1.02)	0.080	0.69 (0.49 to 0.97)	0.031
Finland	0.84 (0.58 to 1.23)	0.379	0.86 (0.74 to 1.00)	0.054	1.05 (0.90 to 1.22)	0.517	0.85 (0.73 to 1.00)	0.053
Taiwan								
Netherlands								
Estonia	1.27 (0.72 to 2.23)	0.409	1.03 (0.76 to 1.38)	0.860	1.19 (0.89 to 1.59)	0.245	1.09 (0.86 to 1.40)	0.465
Slovenia	1.07 (0.48 to 2.37)	0.876	1.13 (0.84 to 1.51)	0.421	0.81 (0.64 to 1.02)	0.077	0.90 (0.77 to 1.06)	0.218
Poland	0.99 (0.80 to 1.23)	0.939	1.03 (0.98 to 1.09)	0.233	1.00 (0.95 to 1.05)	0.993	0.99 (0.94 to 1.05)	0.811
Germany								
Denmark								
Belgium								
Croatia	1.46 (0.81 to 2.64)	0.208	1.02 (0.82 to 1.28)	0.852	0.96 (0.81 to 1.13)	0.610	1.03 (0.90 to 1.18)	0.700
Czech Republic	1.40 (0.92 to 2.12)	0.118	0.96 (0.84 to 1.10)	0.580	1.21 (1.08 to 1.35)	<0.001	0.95 (0.86 to 1.05)	0.312
Austria	1.10 (0.69 to 1.75)	0.686	1.20 (1.01 to 1.43)	0.041	0.95 (0.84 to 1.07)	0.386	1.32 (1.20 to 1.45)	<0.001
Japan	1.21 (1.12 to 1.31)	<0.001	1.17 (1.13 to 1.20)	<0.001	1.00 (0.97 to 1.02)	0.764	1.06 (1.03 to 1.08)	<0.001

Table 9: Countries, first nine months of the pandemic: Males <20 yrs, Males 20-39 yrs, Males 40-59 yrs, Males ≥60 yrs

	Males < 20 yrs		Males 20-39 yrs		Males 40-59 yrs		Males ≥60 yrs	
	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value
USA								
South Korea								
Brazil	0.72 (0.66 to 0.78)	<0.001	0.86 (0.82 to 0.89)	<0.001	0.93 (0.89 to 0.97)	<0.001	0.93 (0.88 to 0.98)	0.004
England and Wales	0.47 (0.36 to 0.62)	<0.001	0.70 (0.65 to 0.75)	<0.001	0.77 (0.72 to 0.82)	<0.001	0.84 (0.77 to 0.91)	<0.001
Mexico	0.97 (0.89 to 1.06)	0.483	0.89 (0.86 to 0.93)	<0.001	0.98 (0.93 to 1.04)	0.541	1.11 (1.02 to 1.21)	0.012
Sweden	0.75 (0.51 to 1.11)	0.152	0.81 (0.70 to 0.94)	0.006	0.90 (0.78 to 1.04)	0.145	1.12 (0.98 to 1.28)	0.084
New Zealand	0.86 (0.60 to 1.24)	0.423	0.86 (0.73 to 1.02)	0.088	0.87 (0.72 to 1.06)	0.159	0.87 (0.67 to 1.13)	0.299
Norway								
Peru	1.07 (0.84 to 1.37)	0.563	0.88 (0.73 to 1.06)	0.166	0.73 (0.59 to 0.92)	0.007	1.09 (0.87 to 1.38)	0.451
Scotland	1.18 (0.78 to 1.80)	0.426	1.04 (0.89 to 1.20)	0.649	1.05 (0.90 to 1.24)	0.535	0.79 (0.60 to 1.04)	0.098
Ecuador	1.08 (0.90 to 1.30)	0.413	0.91 (0.81 to 1.02)	0.109	0.77 (0.66 to 0.89)	<0.001	0.96 (0.81 to 1.14)	0.611
Costa Rica	0.42 (0.25 to 0.70)	<0.001	0.81 (0.66 to 1.00)	0.053	0.74 (0.57 to 0.94)	0.016	0.69 (0.48 to 0.98)	0.039
Finland	0.76 (0.47 to 1.23)	0.265	0.80 (0.67 to 0.95)	0.012	1.15 (0.96 to 1.36)	0.121	1.14 (0.95 to 1.36)	0.158
Taiwan								
Netherlands								
Estonia	np	np	1.09 (0.79 to 1.49)	0.602	1.09 (0.78 to 1.51)	0.625	1.27 (0.96 to 1.67)	0.094
Slovenia	np	np	1.42 (1.04 to 1.94)	0.027	0.81 (0.64 to 1.04)	0.103	0.82 (0.68 to 0.99)	0.043
Poland	0.89 (0.67 to 1.19)	0.429	1.03 (0.98 to 1.10)	0.257	0.97 (0.92 to 1.03)	0.323	0.98 (0.92 to 1.04)	0.429
Germany								
Denmark								
Belgium								
Croatia	0.97 (0.46 to 2.03)	0.933	1.15 (0.91 to 1.45)	0.241	0.94 (0.78 to 1.14)	0.542	1.31 (1.12 to 1.52)	<0.001
Czech Republic	1.41 (0.84 to 2.38)	0.198	0.93 (0.80 to 1.08)	0.362	1.33 (1.18 to 1.50)	<0.001	0.96 (0.85 to 1.07)	0.449
Austria	1.52 (0.87 to 2.68)	0.144	1.14 (0.93 to 1.38)	0.207	0.99 (0.86 to 1.13)	0.833	1.35 (1.22 to 1.51)	<0.001
Japan	1.18 (1.07 to 1.31)	0.001	1.09 (1.05 to 1.13)	<0.001	0.91 (0.88 to 0.94)	<0.001	1.00 (0.97 to 1.03)	1.000

Table 10: Countries, first nine months of the pandemic: Females <20 yrs, Females 20-39 yrs, Females 40-59 yrs, Females ≥60 yrs

	Females < 20 yrs		Females 20-39 yrs		Females 40-59 yrs		Females ≥60 yrs	
	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value
USA								
South Korea								
Brazil	0.79 (0.69 to 0.90)	<0.001	0.74 (0.68 to 0.79)	<0.001	0.93 (0.86 to 1.01)	0.075	1.16 (1.04 to 1.30)	0.010
England and Wales	1.42 (1.01 to 1.99)	0.041	0.60 (0.53 to 0.69)	<0.001	0.76 (0.68 to 0.85)	<0.001	0.97 (0.84 to 1.12)	0.665
Mexico	0.93 (0.83 to 1.04)	0.197	0.93 (0.85 to 1.01)	0.093	0.78 (0.68 to 0.89)	<0.001	1.51 (1.21 to 1.88)	<0.001
Sweden	1.82 (0.98 to 3.39)	0.058	0.61 (0.48 to 0.78)	<0.001	0.71 (0.57 to 0.89)	0.003	1.00 (0.80 to 1.24)	0.974
New Zealand	0.52 (0.31 to 0.86)	0.011	1.12 (0.85 to 1.47)	0.414	0.51 (0.34 to 0.76)	0.001	0.43 (0.25 to 0.75)	0.003
Norway								
Peru	0.52 (0.40 to 0.67)	<0.001	1.01 (0.73 to 1.42)	0.932	0.55 (0.36 to 0.83)	0.005	0.59 (0.29 to 1.17)	0.133
Scotland	np	np	0.45 (0.33 to 0.61)	<0.001	1.17 (0.92 to 1.49)	0.209	1.75 (1.14 to 2.68)	0.011
Ecuador	1.02 (0.79 to 1.31)	0.872	0.75 (0.59 to 0.96)	0.023	1.12 (0.80 to 1.56)	0.508	1.46 (0.98 to 2.18)	0.062
Costa Rica	1.35 (0.72 to 2.50)	0.347	1.06 (0.74 to 1.51)	0.764	3.89 (2.42 to 6.26)	<0.001	np	np
Finland	1.13 (0.61 to 2.11)	0.691	1.56 (1.18 to 2.07)	0.002	0.81 (0.59 to 1.11)	0.186	0.66 (0.46 to 0.96)	0.028
Taiwan								
Netherlands								
Estonia	4.24 (2.02 to 8.90)	<0.001	np	np	1.77 (0.95 to 3.28)	0.072	0.75 (0.45 to 1.25)	0.272
Slovenia	np	np	np	np	0.53 (0.28 to 1.02)	0.056	1.31 (0.96 to 1.78)	0.085
Poland	1.31 (0.93 to 1.83)	0.118	0.82 (0.70 to 0.96)	0.013	1.21 (1.05 to 1.40)	0.008	1.08 (0.95 to 1.23)	0.248
Germany								
Denmark								
Belgium								
Croatia	np	np	0.44 (0.20 to 0.99)	0.046	2.02 (1.44 to 2.82)	<0.001	1.00 (0.75 to 1.34)	0.995
Czech Republic	0.90 (0.45 to 1.80)	0.764	1.20 (0.86 to 1.69)	0.286	0.86 (0.66 to 1.13)	0.287	0.92 (0.73 to 1.17)	0.511
Austria	2.60 (1.17 to 5.79)	0.019	1.27 (0.86 to 1.87)	0.222	0.60 (0.46 to 0.77)	<0.001	1.02 (0.82 to 1.26)	0.880
Japan	1.24 (1.09 to 1.40)	<0.001	1.40 (1.33 to 1.48)	<0.001	1.22 (1.17 to 1.28)	<0.001	1.17 (1.12 to 1.22)	<0.001

10. Full results: Countries, first 10-15 months of the pandemic (1 April 2020 to the latest month for which data were available, from at least 31 January 2021 and potentially up until 30 June 2021)

Table 11: Countries, first 10-15 months of the pandemic: All suicides, males, females

	All suicides		Males		Females	
	RR (95% CI)	**P-value**	**RR (95% CI)**	**P-value**	**RR (95% CI)**	**P-value**
USA	0.97 (0.96 to 0.98)	<0.001				
South Korea	0.90 (0.88 to 0.91)	<0.001	0.90 (0.88 to 0.91)	<0.001	0.82 (0.80 to 0.84)	<0.001
Brazil	0.80 (0.79 to 0.82)	<0.001	0.80 (0.79 to 0.82)	<0.001	0.80 (0.77 to 0.84)	<0.001
Ecuador	0.89 (0.85 to 0.94)	<0.001	0.85 (0.80 to 0.90)	<0.001	0.99 (0.88 to 1.10)	0.831
New Zealand	0.85 (0.79 to 0.91)	<0.001	0.91 (0.84 to 0.99)	0.023	0.70 (0.60 to 0.81)	<0.001
Peru	0.97 (0.90 to 1.04)	0.332	1.02 (0.94 to 1.11)	0.601	0.73 (0.64 to 0.83)	<0.001
Estonia	0.99 (0.88 to 1.12)	0.929	1.01 (0.88 to 1.16)	0.841	0.97 (0.74 to 1.27)	0.824
Netherlands	1.03 (0.99 to 1.08)	0.167	1.09 (1.03 to 1.15)	0.003	0.98 (0.91 to 1.07)	0.687
Poland	1.02 (1.00 to 1.05)	0.054	1.01 (0.98 to 1.03)	0.547	1.12 (1.05 to 1.19)	<0.001
Croatia	1.04 (0.97 to 1.12)	0.305	1.05 (0.96 to 1.14)	0.271	1.50 (1.28 to 1.76)	<0.001
Japan	1.05 (1.04 to 1.06)	<0.001	0.98 (0.96 to 0.99)	0.002	1.24 (1.22 to 1.27)	<0.001

Table 12: Countries, first 10-15 months of the pandemic: <20 yrs, 20-39 yrs, 40-59 yrs, ≥60 yrs

	<20 yrs		**20-39 yrs**		**40-59 yrs**		**≥60 yrs**	
	RR (95% CI)	**P-value**	**RR (95% CI)**	**P-value**	**RR (95% CI)**	**P-value**	**RR (95% CI)**	**P-value**
USA								
South Korea								
Brazil	0.68 (0.64 to 0.72)	<0.001	0.77 (0.75 to 0.79)	<0.001	0.86 (0.83 to 0.89)	<0.001	0.80 (0.77 to 0.84)	<0.001
Ecuador	1.11 (0.99 to 1.25)	0.069	0.91 (0.84 to 0.98)	0.018	1.00 (0.90 to 1.11)	0.990	1.06 (0.93 to 1.20)	0.417
New Zealand	0.73 (0.58 to 0.92)	0.008	0.96 (0.86 to 1.07)	0.410	0.82 (0.71 to 0.93)	0.002	0.77 (0.64 to 0.91)	0.003
Peru	0.93 (0.81 to 1.06)	0.271	1.19 (1.06 to 1.34)	0.003	0.73 (0.62 to 0.85)	<0.001	0.95 (0.80 to 1.13)	0.567
Estonia	1.03 (0.64 to 1.65)	0.914	0.98 (0.77 to 1.24)	0.848	1.13 (0.90 to 1.43)	0.293	1.00 (0.82 to 1.22)	0.979
Netherlands								
Poland	1.07 (0.91 to 1.27)	0.414	1.03 (0.99 to 1.07)	0.163	1.04 (0.99 to 1.08)	0.095	0.98 (0.94 to 1.02)	0.304
Croatia	1.31 (0.80 to 2.13)	0.284	0.98 (0.82 to 1.17)	0.819	1.02 (0.89 to 1.16)	0.793	1.06 (0.95 to 1.18)	0.285
Japan	1.17 (1.10 to 1.24)	<0.001	1.18 (1.15 to 1.21)	<0.001	1.00 (0.98 to 1.02)	0.855	1.05 (1.03 to 1.08)	<0.001

Table 13: Countries, first 10-15 months of the pandemic: Males <20 yrs, Males 20-39 yrs, Males 40-59 yrs, Males ≥60 yrs

	Males < 20 yrs		Males 20-39 yrs		Males 40-59 yrs		Males ≥60 yrs	
	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value
USA								
South Korea								
Brazil	0.62 (0.58 to 0.67)	<0.001	0.80 (0.77 to 0.82)	<0.001	0.85 (0.82 to 0.87)	<0.001	0.82 (0.78 to 0.86)	<0.001
Ecuador	1.08 (0.94 to 1.25)	0.289	0.94 (0.86 to 1.02)	0.141	0.80 (0.71 to 0.89)	<0.001	0.79 (0.68 to 0.91)	<0.001
New Zealand	0.82 (0.62 to 1.08)	0.163	0.93 (0.82 to 1.06)	0.287	0.91 (0.79 to 1.06)	0.217	0.88 (0.72 to 1.08)	0.213
Peru	0.96 (0.79 to 1.17)	0.670	1.04 (0.91 to 1.19)	0.570	0.70 (0.59 to 0.83)	<0.001	1.01 (0.84 to 1.21)	0.908
Estonia	0.44 (0.21 to 0.92)	0.029	0.98 (0.76 to 1.26)	0.875	1.09 (0.84 to 1.41)	0.532	1.19 (0.95 to 1.49)	0.125
Netherlands								
Poland	0.97 (0.78 to 1.21)	0.779	1.02 (0.98 to 1.07)	0.284	1.01 (0.96 to 1.05)	0.711	0.96 (0.92 to 1.01)	0.130
Croatia	0.84 (0.45 to 1.57)	0.590	1.03 (0.85 to 1.25)	0.766	1.03 (0.89 to 1.19)	0.732	1.38 (1.23 to 1.56)	<0.001
Japan	1.13 (1.04 to 1.22)	0.002	1.11 (1.08 to 1.14)	<0.001	0.92 (0.89 to 0.94)	<0.001	0.99 (0.97 to 1.02)	0.607

Table 14: Countries, first 10-15 months of the pandemic: Females <20 yrs, Females 20-39 yrs, Females 40-59 yrs, Females ≥60 yrs

	Females < 20 yrs		Females 20-39 yrs		Females 40-59 yrs		Females ≥60 yrs	
	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value
USA								
South Korea								
Brazil	0.77 (0.69 to 0.86)	<0.001	0.66 (0.62 to 0.70)	<0.001	0.89 (0.83 to 0.95)	<0.001	1.03 (0.93 to 1.13)	0.610
Ecuador	1.14 (0.95 to 1.38)	0.162	0.79 (0.66 to 0.96)	0.014	1.03 (0.79 to 1.34)	0.837	1.18 (0.83 to 1.66)	0.358
New Zealand	0.53 (0.36 to 0.80)	0.003	1.02 (0.82 to 1.27)	0.857	0.57 (0.42 to 0.76)	<0.001	0.50 (0.34 to 0.74)	<0.001
Peru	0.46 (0.38 to 0.55)	<0.001	1.74 (1.40 to 2.18)	<0.001	0.32 (0.22 to 0.45)	<0.001	0.66 (0.41 to 1.08)	0.098
Estonia	3.73 (2.00 to 6.92)	<0.001	0.95 (0.49 to 1.82)	0.876	1.38 (0.80 to 2.38)	0.241	0.63 (0.41 to 0.97)	0.036
Netherlands								
Poland	1.31 (1.01 to 1.69)	0.043	0.80 (0.71 to 0.90)	<0.001	1.24 (1.11 to 1.39)	<0.001	1.04 (0.94 to 1.15)	0.412
Croatia	8.60 (3.87 to 19.15)	<0.001	0.75 (0.47 to 1.21)	0.245	2.19 (1.67 to 2.87)	<0.001	1.09 (0.87 to 1.35)	0.451
Japan	1.21 (1.10 to 1.33)	<0.001	1.40 (1.35 to 1.47)	<0.001	1.24 (1.19 to 1.28)	<0.001	1.17 (1.14 to 1.21)	<0.001

11. Full results: Areas-within-countries, first nine months of the pandemic (1 April 2020 to 31 December 2020)

Table 15: Areas-within-countries, first nine months of the pandemic: All suicides, males, females

	All suicides		Males		Females	
	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value
USA, Pennsylvania	0.89 (0.84 to 0.94)	<0.001				
Canada, British Columbia	0.76 (0.69 to 0.84)	<0.001				
Australia, Tasmania	0.64 (0.49 to 0.82)	<0.001	1.04 (0.80 to 1.37)	0.751	0.20 (0.10 to 0.41)	<0.001
Italy, Milan	0.56 (0.44 to 0.71)	<0.001	0.62 (0.47 to 0.80)	<0.001	0.44 (0.26 to 0.76)	0.003
Australia, New South Wales	0.89 (0.83 to 0.96)	0.003				
Australia, Victoria	0.88 (0.80 to 0.96)	0.003	0.86 (0.77 to 0.95)	0.003	1.05 (0.89 to 1.24)	0.525
USA, California	0.88 (0.85 to 0.91)	<0.001	0.86 (0.83 to 0.90)	<0.001	0.96 (0.89 to 1.03)	0.247
Germany, Frankfurt	0.43 (0.34 to 0.54)	<0.001	0.42 (0.31 to 0.55)	<0.001	0.64 (0.41 to 0.99)	0.046
Australia, Queensland	1.08 (0.99 to 1.17)	0.071	1.13 (1.03 to 1.24)	0.013	0.88 (0.74 to 1.04)	0.136
Canada, Alberta	1.01 (0.92 to 1.11)	0.837				
USA, Texas (4 counties)	0.86 (0.77 to 0.97)	0.016	0.92 (0.81 to 1.04)	0.194	0.68 (0.51 to 0.90)	0.007
Germany, Saxony	0.98 (0.89 to 1.07)	0.603	1.07 (0.97 to 1.18)	0.177	0.74 (0.61 to 0.91)	0.004
Russia, Saint Petersburg	1.01 (0.89 to 1.14)	0.930	1.02 (0.88 to 1.18)	0.840	0.70 (0.55 to 0.90)	0.005
USA, Illinois (Cook County)	0.88 (0.79 to 0.98)	0.017	0.91 (0.81 to 1.03)	0.140	0.76 (0.60 to 0.97)	0.026
England, Thames Valley	0.84 (0.71 to 0.98)	0.030				
Austria, Tyrol	0.79 (0.63 to 1.00)	0.047	0.81 (0.62 to 1.06)	0.121	0.74 (0.47 to 1.18)	0.203
China, Hong Kong	1.00 (0.92 to 1.08)	0.963	1.00 (0.91 to 1.11)	0.933	0.94 (0.82 to 1.07)	0.325
Canada, Nova Scotia	0.84 (0.68 to 1.04)	0.106	0.85 (0.67 to 1.08)	0.186	0.87 (0.55 to 1.38)	0.548
USA, Wisconsin (4 counties)	1.03 (0.83 to 1.26)	0.807	1.08 (0.86 to 1.35)	0.531	0.84 (0.51 to 1.37)	0.484
India, Bihar	np	np	np	np	np	np
Italy, Udine and Pordenone	0.97 (0.75 to 1.26)	0.838	0.95 (0.70 to 1.28)	0.721	1.24 (0.76 to 2.03)	0.388
Canada, Saskatchewan	1.15 (0.98 to 1.35)	0.089	0.79 (0.66 to 0.95)	0.014	1.16 (0.85 to 1.58)	0.357
Ukraine, Odessa	1.03 (0.92 to 1.14)	0.636	1.00 (0.89 to 1.13)	0.958	1.14 (0.88 to 1.47)	0.312
USA, Massachusetts	1.01 (0.93 to 1.11)	0.759	1.04 (0.94 to 1.16)	0.431	1.03 (0.86 to 1.25)	0.728
USA, Puerto Rico	1.11 (0.94 to 1.31)	0.212	1.15 (0.96 to 1.38)	0.121	0.78 (0.52 to 1.18)	0.238
India, Uttar Pradesh	6.06 (3.15 to 11.64)	<0.001	0.94 (0.45 to 1.96)	0.859	np	np
Canada, Manitoba	0.88 (0.75 to 1.03)	0.100	0.83 (0.69 to 1.00)	0.045	0.98 (0.75 to 1.30)	0.911
USA, New Jersey	1.07 (0.98 to 1.17)	0.117	1.03 (0.94 to 1.14)	0.517	1.20 (1.01 to 1.44)	0.044
Germany, Cologne and Leverkusen	1.17 (0.96 to 1.42)	0.125	0.96 (0.76 to 1.22)	0.754	2.06 (1.44 to 2.95)	<0.001
India, New Delhi	1.40 (1.27 to 1.54)	<0.001	1.40 (1.25 to 1.56)	<0.001	1.55 (1.28 to 1.88)	<0.001
Iran, Kerman Province	2.05 (1.75 to 2.41)	<0.001	2.35 (1.95 to 2.82)	<0.001	1.21 (0.88 to 1.68)	0.243
Russia, Udmurtia	1.26 (1.13 to 1.41)	<0.001	1.33 (1.19 to 1.50)	<0.001	0.93 (0.69 to 1.25)	0.628

Austria, Carinthia	2.54 (2.03 to 3.17)	<0.001	2.65 (2.08 to 3.38)	<0.001	0.60 (0.33 to 1.08)	0.088
Canada, Ontario	1.51 (1.42 to 1.60)	<0.001				

Table 16: Areas-within-countries, first nine months of the pandemic: <20 yrs, 20-39 yrs, 40-59 yrs, ≥60 yrs

	<20 yrs		20-39 yrs		40-59 yrs		≥60 yrs	
	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value
USA, Pennsylvania								
Canada, British Columbia								
Australia, Tasmania	np	np	0.95 (0.60 to 1.49)	0.815	0.45 (0.27 to 0.76)	0.003	1.20 (0.79 to 1.83)	0.388
Italy, Milan	np	np	0.62 (0.39 to 0.98)	0.042	0.57 (0.38 to 0.85)	0.006	1.45 (0.96 to 2.18)	0.074
Australia, New South Wales								
Australia, Victoria	0.81 (0.56 to 1.18)	0.271	1.00 (0.87 to 1.14)	0.948	0.72 (0.62 to 0.84)	<0.001	0.74 (0.62 to 0.89)	0.001
USA, California								
Germany, Frankfurt	np	np	0.65 (0.41 to 1.03)	0.066	0.20 (0.14 to 0.30)	<0.001	1.89 (1.26 to 2.85)	0.002
Australia, Queensland	1.17 (0.87 to 1.57)	0.289	1.03 (0.90 to 1.17)	0.696	0.70 (0.60 to 0.82)	<0.001	1.06 (0.89 to 1.25)	0.520
Canada, Alberta								
USA, Texas (4 counties)	0.83 (0.58 to 1.20)	0.323	0.93 (0.77 to 1.12)	0.455	0.70 (0.56 to 0.88)	0.002	1.03 (0.79 to 1.33)	0.843
Germany, Saxony	1.81 (1.00 to 3.27)	0.049	0.81 (0.64 to 1.03)	0.089	0.94 (0.79 to 1.11)	0.468	1.03 (0.91 to 1.16)	0.623
Russia, Saint Petersburg	0.64 (0.34 to 1.19)	0.158	1.07 (0.87 to 1.31)	0.534	1.13 (0.90 to 1.41)	0.306	0.93 (0.73 to 1.19)	0.563
USA, Illinois (Cook County)	1.50 (1.02 to 2.23)	0.041	0.93 (0.78 to 1.12)	0.463	0.80 (0.66 to 0.97)	0.022	0.88 (0.71 to 1.09)	0.233
England, Thames Valley								
Austria, Tyrol	np	np	0.34 (0.16 to 0.70)	0.004	0.84 (0.59 to 1.18)	0.310	1.11 (0.78 to 1.56)	0.571
China, Hong Kong	1.29 (0.87 to 1.91)	0.203	1.06 (0.90 to 1.26)	0.472	0.80 (0.69 to 0.92)	0.002	0.95 (0.84 to 1.07)	0.372
Canada, Nova Scotia								
USA, Wisconsin (4 counties)	np	np	0.99 (0.71 to 1.37)	0.943	1.00 (0.69 to 1.43)	0.987	1.23 (0.81 to 1.87)	0.331
India, Bihar	np	np	np	np	np	np	np	np
Italy, Udine and Pordenone	np	np	0.85 (0.46 to 1.58)	0.605	0.76 (0.46 to 1.24)	0.268	1.20 (0.85 to 1.69)	0.312
Canada, Saskatchewan	1.52 (0.96 to 2.41)	0.076	0.91 (0.73 to 1.15)	0.447	0.86 (0.62 to 1.19)	0.368	0.70 (0.47 to 1.05)	0.083
Ukraine, Odessa	2.07 (1.11 to 3.85)	0.021	0.89 (0.72 to 1.09)	0.259	1.17 (0.99 to 1.39)	0.072	0.98 (0.81 to 1.19)	0.844
USA, Massachusetts	1.07 (0.68 to 1.70)	0.766	0.82 (0.69 to 0.97)	0.021	1.02 (0.88 to 1.18)	0.799	1.31 (1.11 to 1.55)	0.001
USA, Puerto Rico	np	np	0.93 (0.68 to 1.28)	0.649	1.02 (0.76 to 1.37)	0.877	1.52 (1.17 to 1.99)	0.002
India, Uttar Pradesh	np	np	np	np	np	np	np	np
Canada, Manitoba	0.63 (0.35 to 1.13)	0.119	1.06 (0.86 to 1.31)	0.596	0.81 (0.60 to 1.10)	0.177	0.67 (0.45 to 1.01)	0.058
USA, New Jersey	0.62 (0.41 to 0.94)	0.024	1.09 (0.93 to 1.28)	0.299	1.18 (1.01 to 1.36)	0.031	1.06 (0.91 to 1.23)	0.473
Germany, Cologne and Leverkusen	np	np	1.45 (0.94 to 2.22)	0.089	1.26 (0.89 to 1.77)	0.191	0.97 (0.71 to 1.32)	0.849
India, New Delhi	0.19 (0.15 to 0.25)	<0.001	2.78 (2.46 to 3.13)	<0.001	6.93 (5.52 to 8.70)	<0.001	2.97 (1.79 to 4.92)	<0.001
Iran, Kerman Province	5.14 (3.65 to 7.23)	<0.001	1.87 (1.50 to 2.32)	<0.001	0.74 (0.50 to 1.08)	0.118	0.51 (0.26 to 1.03)	0.060
Russia, Udmurtia	1.27 (0.72 to 2.23)	0.413	1.09 (0.91 to 1.31)	0.339	1.00 (0.82 to 1.21)	0.987	1.53 (1.25 to 1.87)	<0.001
Austria, Carinthia	np	np	1.02 (0.59 to 1.76)	0.931	3.12 (2.17 to 4.49)	<0.001	2.07 (1.48 to 2.89)	<0.001
Canada, Ontario								

Table 17: Areas-within-countries, first nine months of the pandemic: Males <20 yrs, Males 20-39 yrs, Males 40-59 yrs, Males ≥60 yrs

	Males < 20 yrs		Males 20-39 yrs		Males 40-59 yrs		Males ≥60 yrs	
	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value
USA, Pennsylvania								
Canada, British Columbia								
Australia, Tasmania	np	np	1.02 (0.61 to 1.69)	0.948	0.63 (0.36 to 1.08)	0.092	1.44 (0.92 to 2.26)	0.109
Italy, Milan	np	np	0.59 (0.34 to 1.02)	0.060	0.66 (0.42 to 1.03)	0.065	1.37 (0.88 to 2.13)	0.158
Australia, New South Wales								
Australia, Victoria	0.53 (0.35 to 0.80)	0.003	0.88 (0.74 to 1.04)	0.126	0.68 (0.56 to 0.81)	<0.001	0.77 (0.62 to 0.94)	0.013
USA, California								
Germany, Frankfurt	np	np	0.58 (0.34 to 0.98)	0.041	0.71 (0.44 to 1.16)	0.171	3.18 (1.98 to 5.12)	<0.001
Australia, Queensland	1.36 (0.96 to 1.91)	0.080	1.37 (1.19 to 1.59)	<0.001	0.76 (0.64 to 0.90)	0.001	0.97 (0.79 to 1.19)	0.777
Canada, Alberta								
USA, Texas (4 counties)	1.03 (0.70 to 1.51)	0.884	1.01 (0.82 to 1.24)	0.925	0.68 (0.53 to 0.88)	0.003	1.11 (0.84 to 1.46)	0.472
Germany, Saxony	2.46 (1.28 to 4.72)	0.007	0.88 (0.68 to 1.14)	0.321	0.76 (0.63 to 0.92)	0.006	1.12 (0.98 to 1.28)	0.101
Russia, Saint Petersburg	np	np	0.76 (0.60 to 0.97)	0.024	1.20 (0.93 to 1.53)	0.160	1.32 (0.98 to 1.79)	0.069
USA, Illinois (Cook County)	0.84 (0.52 to 1.35)	0.472	1.03 (0.84 to 1.27)	0.763	0.82 (0.66 to 1.02)	0.076	0.89 (0.71 to 1.13)	0.335
England, Thames Valley								
Austria, Tyrol	np	np	np	np	0.79 (0.54 to 1.18)	0.250	1.26 (0.84 to 1.87)	0.265
China, Hong Kong	1.64 (0.99 to 2.71)	0.057	0.88 (0.72 to 1.08)	0.217	1.00 (0.84 to 1.20)	0.975	0.87 (0.74 to 1.01)	0.070
Canada, Nova Scotia								
USA, Wisconsin (4 counties)	np	np	1.10 (0.77 to 1.56)	0.599	1.18 (0.80 to 1.75)	0.398	1.11 (0.68 to 1.81)	0.674
India, Bihar	np	np	np	np	np	np	np	np
Italy, Udine and Pordenone	np	np	0.78 (0.39 to 1.57)	0.491	0.65 (0.35 to 1.21)	0.176	1.18 (0.79 to 1.75)	0.428
Canada, Saskatchewan	3.90 (2.10 to 7.25)	<0.001	0.83 (0.63 to 1.10)	0.192	0.79 (0.55 to 1.13)	0.204	0.64 (0.41 to 1.01)	0.055
Ukraine, Odessa	2.34 (1.12 to 4.91)	0.024	0.96 (0.78 to 1.19)	0.724	1.16 (0.96 to 1.40)	0.130	0.83 (0.66 to 1.05)	0.125
USA, Massachusetts	0.88 (0.46 to 1.70)	0.709	0.87 (0.72 to 1.05)	0.141	0.93 (0.79 to 1.10)	0.414	1.17 (0.97 to 1.42)	0.103
USA, Puerto Rico								
India, Uttar Pradesh	np	np	np	np	np	np	np	np
Canada, Manitoba	0.62 (0.28 to 1.38)	0.239	0.96 (0.73 to 1.25)	0.756	0.74 (0.52 to 1.05)	0.088	0.65 (0.42 to 1.00)	0.052
USA, New Jersey								
Germany, Cologne and Leverkusen	np	np	1.29 (0.79 to 2.10)	0.311	0.94 (0.61 to 1.45)	0.786	0.82 (0.56 to 1.18)	0.279
India, New Delhi	0.17 (0.12 to 0.23)	<0.001	2.24 (1.94 to 2.58)	<0.001	7.83 (6.16 to 9.94)	<0.001	2.56 (1.38 to 4.76)	0.003
Iran, Kerman Province	22.86 (14.58 to 35.84)	<0.001	1.88 (1.47 to 2.41)	<0.001	0.87 (0.58 to 1.29)	0.479	0.78 (0.39 to 1.55)	0.477
Russia, Udmurtia	np	np	1.54 (1.28 to 1.85)	<0.001	0.96 (0.78 to 1.18)	0.703	1.81 (1.45 to 2.25)	<0.001
Austria, Carinthia	np	np	0.94 (0.54 to 1.66)	0.837	1.18 (0.79 to 1.76)	0.421	2.51 (1.74 to 3.61)	<0.001
Canada, Ontario								

Table 18: Areas-within-countries, first nine months of the pandemic: Females <20 yrs, Females 20-39 yrs, Females 40-59 yrs, Females ≥60 yrs

	Females < 20 yrs		Females 20-39 yrs		Females 40-59 yrs		Females ≥60 yrs	
	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value
USA, Pennsylvania								
Canada, British Columbia								
Australia, Tasmania	np	np	np	np	np	np	np	np
Italy, Milan	np	np	np	np	np	np	np	np
Australia, New South Wales								
Australia, Victoria	0.55 (0.25 to 1.22)	0.141	1.41 (1.10 to 1.81)	0.006	1.03 (0.77 to 1.37)	0.861	0.77 (0.53 to 1.12)	0.172
USA, California								
Germany, Frankfurt	np	np	np	np	0.82 (0.43 to 1.57)	0.544	0.43 (0.19 to 0.95)	0.037
Australia, Queensland	2.63 (1.49 to 4.62)	<0.001	0.48 (0.36 to 0.65)	<0.001	0.98 (0.71 to 1.36)	0.893	1.36 (0.99 to 1.86)	0.061
Canada, Alberta								
USA, Texas (4 counties)	np	np	0.68 (0.44 to 1.05)	0.080	0.78 (0.49 to 1.26)	0.306	0.68 (0.32 to 1.42)	0.299
Germany, Saxony	np	np	0.56 (0.30 to 1.05)	0.069	0.65 (0.44 to 0.96)	0.032	0.83 (0.64 to 1.07)	0.145
Russia, Saint Petersburg	np	np	1.11 (0.73 to 1.68)	0.632	0.49 (0.29 to 0.85)	0.011	1.06 (0.70 to 1.59)	0.782
USA, Illinois (Cook County)	1.13 (0.56 to 2.25)	0.735	0.66 (0.43 to 1.00)	0.049	0.73 (0.48 to 1.09)	0.126	0.86 (0.52 to 1.43)	0.568
England, Thames Valley								
Austria, Tyrol	np	np	np	np	0.93 (0.44 to 1.95)	0.848	0.77 (0.38 to 1.53)	0.451
China, Hong Kong	0.89 (0.48 to 1.65)	0.710	0.93 (0.70 to 1.26)	0.652	0.77 (0.61 to 0.98)	0.031	1.11 (0.92 to 1.34)	0.283
Canada, Nova Scotia								
USA, Wisconsin (4 counties)	np	np	np	np	np	np	1.72 (0.77 to 3.84)	0.182
India, Bihar	np	np	np	np	np	np	np	np
Italy, Udine and Pordenone	np	np	np	np	1.04 (0.47 to 2.31)	0.925	1.25 (0.62 to 2.49)	0.535
Canada, Saskatchewan	0.78 (0.39 to 1.56)	0.481	1.19 (0.77 to 1.82)	0.434	1.16 (0.52 to 2.57)	0.723	np	np
Ukraine, Odessa	np	np	np	np	1.25 (0.82 to 1.90)	0.293	1.73 (1.21 to 2.47)	0.003
USA, Massachusetts	1.32 (0.69 to 2.53)	0.408	0.66 (0.44 to 0.97)	0.036	0.64 (0.47 to 0.88)	0.006	2.06 (1.46 to 2.90)	<0.001
USA, Puerto Rico								
India, Uttar Pradesh	np	np	np	np	np	np	np	np
Canada, Manitoba	np	np	1.10 (0.77 to 1.56)	0.607	3.01 (1.67 to 5.43)	<0.001	np	np
USA, New Jersey								
Germany, Cologne and Leverkusen	np	np	np	np	2.55 (1.45 to 4.48)	0.001	1.57 (0.91 to 2.71)	0.102
India, New Delhi	0.28 (0.19 to 0.41)	<0.001	5.19 (4.09 to 6.59)	<0.001	1.31 (0.62 to 2.74)	0.478	np	np
Iran, Kerman Province	2.41 (1.43 to 4.07)	0.001	1.08 (0.70 to 1.67)	0.733	np	np	np	np
Russia, Udmurtia	2.10 (1.00 to 4.40)	0.050	np	np	1.32 (0.80 to 2.19)	0.280	0.53 (0.33 to 0.85)	0.009
Austria, Carinthia	np	np	np	np	0.41 (0.18 to 0.91)	0.028	np	np

Canada, Ontario								

12. Full results: Areas-within-countries, first 10-15 months of the pandemic (1 April 2020 to the latest month for which data were available, from at least 31 January 2021 and potentially up until 30 June 2021)

Table 19: Areas-within-countries, first 10-15 months of the pandemic: All suicides, males, females

	All suicides		Males		Females	
	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value
USA, California	0.86 (0.84 to 0.89)	<0.001	0.85 (0.83 to 0.88)	<0.001	0.93 (0.87 to 0.98)	0.013
Australia, Victoria	0.86 (0.80 to 0.92)	<0.001	0.85 (0.78 to 0.92)	<0.001	0.97 (0.85 to 1.10)	0.615
USA, Pennsylvania	0.88 (0.85 to 0.92)	<0.001				
England, Thames Valley	0.76 (0.67 to 0.86)	<0.001				
Australia, Tasmania	0.59 (0.48 to 0.71)	<0.001	1.03 (0.84 to 1.27)	0.773	0.19 (0.12 to 0.31)	<0.001
Australia, New South Wales	0.91 (0.85 to 0.96)	0.001				
Austria, Tyrol	0.76 (0.63 to 0.91)	0.003	0.78 (0.63 to 0.96)	0.017	0.71 (0.49 to 1.02)	0.067
Italy, Milan	0.65 (0.55 to 0.78)	<0.001	0.65 (0.53 to 0.80)	<0.001	0.72 (0.52 to 1.00)	0.053
Canada, Saskatchewan	1.11 (0.98 to 1.26)	0.113	0.72 (0.62 to 0.84)	<0.001	1.03 (0.80 to 1.33)	0.797
USA, Texas (4 counties)	0.93 (0.85 to 1.02)	0.119	0.95 (0.86 to 1.05)	0.349	0.86 (0.70 to 1.04)	0.118
USA, Illinois (Cook County)	0.90 (0.83 to 0.98)	0.014	0.93 (0.84 to 1.02)	0.109	0.82 (0.69 to 0.98)	0.031
India, Bihar	np	np	np	np	np	np
Italy, Udine and Pordenone	0.84 (0.68 to 1.04)	0.120	0.89 (0.69 to 1.13)	0.338	0.88 (0.57 to 1.35)	0.554
USA, Wisconsin (4 counties)	1.07 (0.91 to 1.25)	0.419	1.08 (0.90 to 1.28)	0.420	1.03 (0.73 to 1.45)	0.887
Canada, Alberta	0.97 (0.90 to 1.04)	0.348				
Canada, Nova Scotia	0.89 (0.76 to 1.04)	0.156	0.87 (0.73 to 1.04)	0.134	1.06 (0.76 to 1.47)	0.738
Germany, Saxony	0.99 (0.92 to 1.06)	0.720	1.03 (0.96 to 1.12)	0.418	0.90 (0.79 to 1.04)	0.160
Australia, Queensland	1.13 (1.06 to 1.20)	<0.001	1.17 (1.09 to 1.25)	<0.001	0.93 (0.82 to 1.06)	0.279
Iran, Kerman Province	2.03 (1.75 to 2.34)	<0.001	2.33 (1.97 to 2.76)	<0.001	1.14 (0.85 to 1.52)	0.391
Germany, Cologne and Leverkusen	1.10 (0.93 to 1.29)	0.266	0.90 (0.75 to 1.09)	0.293	1.97 (1.46 to 2.65)	<0.001
USA, New Jersey	1.09 (1.02 to 1.17)	0.010	1.06 (0.98 to 1.14)	0.160	1.22 (1.05 to 1.41)	0.009
Russia, Udmurtia	1.16 (1.06 to 1.27)	<0.001	1.24 (1.13 to 1.36)	<0.001	0.82 (0.64 to 1.05)	0.119
USA, Puerto Rico	1.21 (1.07 to 1.38)	0.004	1.31 (1.14 to 1.51)	<0.001	0.65 (0.46 to 0.92)	0.016
Austria, Carinthia	3.59 (3.04 to 4.24)	<0.001	3.48 (2.89 to 4.19)	<0.001	0.84 (0.57 to 1.24)	0.379
India, New Delhi	1.47 (1.37 to 1.59)	<0.001	1.41 (1.29 to 1.55)	<0.001	1.75 (1.51 to 2.02)	<0.001

Table 20: Areas-within-countries, first 10-15 months of the pandemic: <20 yrs, 20-39 yrs, 40-59 yrs, ≥60 yrs

	<20 yrs		20-39 yrs		40-59 yrs		≥60 yrs	
	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value
USA, California								
Australia, Victoria	0.87 (0.66 to 1.14)	0.308	0.96 (0.86 to 1.07)	0.504	0.72 (0.64 to 0.80)	<0.001	0.65 (0.56 to 0.75)	<0.001
USA, Pennsylvania								
England, Thames Valley								
Australia, Tasmania	np	np	0.91 (0.64 to 1.30)	0.619	0.59 (0.41 to 0.83)	0.003	1.15 (0.83 to 1.61)	0.399
Australia, New South Wales								
Austria, Tyrol	np	np	0.45 (0.28 to 0.74)	0.002	0.82 (0.63 to 1.07)	0.151	0.97 (0.72 to 1.29)	0.812
Italy, Milan	np	np	0.62 (0.43 to 0.89)	0.010	0.71 (0.54 to 0.94)	0.016	1.97 (1.46 to 2.66)	<0.001
Canada, Saskatchewan	1.70 (1.19 to 2.43)	0.004	0.79 (0.65 to 0.96)	0.019	0.86 (0.67 to 1.11)	0.246	0.62 (0.45 to 0.86)	0.004
USA, Texas (4 counties)	0.87 (0.67 to 1.14)	0.313	1.00 (0.87 to 1.15)	0.988	0.75 (0.63 to 0.88)	<0.001	1.14 (0.94 to 1.39)	0.168
USA, Illinois (Cook County)	1.54 (1.12 to 2.11)	0.008	1.05 (0.92 to 1.20)	0.502	0.81 (0.69 to 0.94)	0.005	0.80 (0.68 to 0.95)	0.009
India, Bihar	np	np	np	np	np	np	np	np
Italy, Udine and Pordenone	np	np	0.73 (0.43 to 1.22)	0.229	0.70 (0.47 to 1.05)	0.084	1.05 (0.79 to 1.41)	0.728
USA, Wisconsin (4 counties)	0.81 (0.36 to 1.80)	0.602	0.95 (0.74 to 1.23)	0.709	1.15 (0.88 to 1.49)	0.308	1.22 (0.88 to 1.69)	0.239
Canada, Alberta								
Canada, Nova Scotia								
Germany, Saxony	2.26 (1.49 to 3.44)	<0.001	0.80 (0.67 to 0.96)	0.018	0.99 (0.87 to 1.13)	0.912	1.04 (0.95 to 1.14)	0.402
Australia, Queensland	1.08 (0.86 to 1.37)	0.510	1.04 (0.94 to 1.15)	0.466	0.75 (0.67 to 0.84)	<0.001	1.06 (0.93 to 1.21)	0.390
Iran, Kerman Province	5.26 (3.85 to 7.21)	<0.001	1.84 (1.51 to 2.24)	<0.001	0.66 (0.46 to 0.96)	0.027	0.55 (0.32 to 0.95)	0.033
Germany, Cologne and Leverkusen	np	np	1.51 (1.07 to 2.12)	0.019	1.27 (0.97 to 1.66)	0.086	0.82 (0.64 to 1.05)	0.119
USA, New Jersey	0.56 (0.40 to 0.78)	<0.001	1.17 (1.03 to 1.32)	0.015	1.29 (1.15 to 1.45)	<0.001	0.96 (0.85 to 1.09)	0.556
Russia, Udmurtia	0.99 (0.59 to 1.64)	0.956	0.88 (0.76 to 1.03)	0.110	0.97 (0.84 to 1.14)	0.744	1.46 (1.24 to 1.72)	<0.001
USA, Puerto Rico	1.44 (0.69 to 3.02)	0.333	1.04 (0.82 to 1.31)	0.750	1.12 (0.89 to 1.41)	0.336	1.57 (1.27 to 1.96)	<0.001
Austria, Carinthia	np	np	1.17 (0.78 to 1.74)	0.452	4.11 (3.06 to 5.53)	<0.001	2.69 (2.11 to 3.43)	<0.001
India, New Delhi	0.12 (0.10 to 0.15)	<0.001	3.32 (3.02 to 3.65)	<0.001	9.36 (7.85 to 11.16)	<0.001	2.77 (1.84 to 4.16)	<0.001

Table 21: Areas-within-countries, first 10-15 months of the pandemic: Males <20 yrs, Males 20-39 yrs, Males 40-59 yrs, Males ≥60 yrs

	Males < 20 yrs		Males 20-39 yrs		Males 40-59 yrs		Males ≥60 yrs	
	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value
USA, California								
Australia, Victoria	0.40 (0.29 to 0.56)	<0.001	0.89 (0.78 to 1.01)	0.079	0.67 (0.59 to 0.77)	<0.001	0.69 (0.59 to 0.82)	<0.001
USA, Pennsylvania								
England, Thames Valley								
Australia, Tasmania	np	np	1.01 (0.68 to 1.49)	0.966	0.77 (0.53 to 1.12)	0.174	1.33 (0.92 to 1.91)	0.124
Australia, New South Wales								
Austria, Tyrol	np	np	0.46 (0.26 to 0.81)	0.007	0.76 (0.56 to 1.03)	0.081	1.09 (0.78 to 1.53)	0.598
Italy, Milan	np	np	0.66 (0.44 to 1.00)	0.048	0.71 (0.51 to 0.99)	0.045	1.42 (0.99 to 2.03)	0.055
Canada, Saskatchewan	5.30 (3.34 to 8.41)	<0.001	0.73 (0.58 to 0.92)	0.008	0.78 (0.59 to 1.03)	0.083	0.57 (0.40 to 0.83)	0.003
USA, Texas (4 counties)	1.02 (0.76 to 1.37)	0.877	1.04 (0.89 to 1.22)	0.626	0.73 (0.60 to 0.88)	<0.001	1.15 (0.93 to 1.42)	0.191
USA, Illinois (Cook County)	0.66 (0.44 to 0.99)	0.047	1.13 (0.97 to 1.32)	0.112	0.84 (0.71 to 1.00)	0.049	0.84 (0.70 to 1.02)	0.073
India, Bihar	np	np	np	np	np	np	np	np
Italy, Udine and Pordenone	np	np	0.72 (0.41 to 1.27)	0.254	0.69 (0.43 to 1.10)	0.121	1.02 (0.73 to 1.42)	0.929
USA, Wisconsin (4 counties)	np	np	1.06 (0.80 to 1.39)	0.704	1.30 (0.97 to 1.74)	0.080	1.01 (0.68 to 1.50)	0.968
Canada, Alberta								
Canada, Nova Scotia								
Germany, Saxony	2.75 (1.69 to 4.49)	<0.001	0.84 (0.68 to 1.03)	0.088	0.71 (0.61 to 0.82)	<0.001	1.05 (0.95 to 1.17)	0.336
Australia, Queensland	1.20 (0.91 to 1.59)	0.203	1.43 (1.28 to 1.61)	<0.001	0.78 (0.68 to 0.88)	<0.001	1.00 (0.85 to 1.16)	0.961
Iran, Kerman Province	27.77 (18.61 to 41.43)	<0.001	1.78 (1.41 to 2.24)	<0.001	0.68 (0.46 to 0.99)	0.046	0.84 (0.49 to 1.45)	0.537
Germany, Cologne and Leverkusen	np	np	1.32 (0.89 to 1.95)	0.170	0.97 (0.70 to 1.35)	0.863	0.69 (0.51 to 0.93)	0.016
USA, New Jersey								
Russia, Udmurtia	0.81 (0.41 to 1.62)	0.555	1.32 (1.13 to 1.54)	<0.001	0.98 (0.83 to 1.15)	0.783	1.68 (1.41 to 2.02)	<0.001
USA, Puerto Rico								
Austria, Carinthia	np	np	0.98 (0.64 to 1.51)	0.942	1.04 (0.75 to 1.45)	0.820	3.10 (2.37 to 4.06)	<0.001
India, New Delhi	0.10 (0.07 to 0.13)	<0.001	2.54 (2.27 to 2.83)	<0.001	10.06 (8.32 to 12.15)	<0.001	2.66 (1.66 to 4.29)	<0.001

Table 22: Areas-within-countries, first 10-15 months of the pandemic: Females <20 yrs, Females 20-39 yrs, Females 40-59 yrs, Females ≥60 yrs

	Females < 20 yrs		Females 20-39 yrs		Females 40-59 yrs		Females ≥60 yrs	
	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value	RR (95% CI)	P-value
USA, California								
Australia, Victoria	0.85 (0.52 to 1.39)	0.521	1.22 (0.99 to 1.50)	0.060	0.99 (0.79 to 1.25)	0.932	0.63 (0.46 to 0.86)	0.004
USA, Pennsylvania								
England, Thames Valley								
Australia, Tasmania	np	np	0.64 (0.29 to 1.44)	0.283	np	np	0.70 (0.31 to 1.56)	0.384
Australia, New South Wales								
Austria, Tyrol	np	np	np	np	0.98 (0.56 to 1.73)	0.945	0.67 (0.38 to 1.18)	0.168
Italy, Milan	np	np	0.51 (0.23 to 1.13)	0.096	0.30 (0.18 to 0.49)	<0.001	2.97 (1.69 to 5.23)	<0.001
Canada, Saskatchewan	0.69 (0.39 to 1.22)	0.207	0.99 (0.70 to 1.42)	0.976	1.22 (0.66 to 2.27)	0.525	0.87 (0.41 to 1.81)	0.702
USA, Texas (4 counties)	0.47 (0.23 to 0.94)	0.033	0.86 (0.64 to 1.16)	0.332	0.81 (0.56 to 1.17)	0.257	1.11 (0.71 to 1.74)	0.647
USA, Illinois (Cook County)	1.27 (0.77 to 2.11)	0.350	0.81 (0.61 to 1.08)	0.150	0.69 (0.50 to 0.95)	0.024	0.88 (0.60 to 1.30)	0.529
India, Bihar	np	np	np	np	np	np	np	np
Italy, Udine and Pordenone	np	np	np	np	0.74 (0.35 to 1.56)	0.433	1.16 (0.66 to 2.04)	0.610
USA, Wisconsin (4 counties)	np	np	0.58 (0.29 to 1.17)	0.128	0.75 (0.40 to 1.39)	0.361	2.07 (1.18 to 3.65)	0.012
Canada, Alberta								
Canada, Nova Scotia								
Germany, Saxony	1.52 (0.68 to 3.37)	0.308	0.65 (0.42 to 1.01)	0.055	0.72 (0.54 to 0.96)	0.023	1.04 (0.87 to 1.24)	0.673
Australia, Queensland	3.28 (2.14 to 5.02)	<0.001	0.43 (0.35 to 0.53)	<0.001	1.27 (1.01 to 1.61)	0.042	1.28 (0.99 to 1.65)	0.057
Iran, Kerman Province	1.93 (1.17 to 3.21)	0.011	1.09 (0.75 to 1.59)	0.652	np	np	np	np
Germany, Cologne and Leverkusen	np	np	2.58 (1.29 to 5.15)	0.007	2.52 (1.57 to 4.06)	<0.001	1.34 (0.84 to 2.12)	0.219
USA, New Jersey								
Russia, Udmurtia	1.29 (0.61 to 2.70)	0.505	0.38 (0.19 to 0.75)	0.006	1.04 (0.67 to 1.63)	0.855	0.49 (0.34 to 0.70)	<0.001
USA, Puerto Rico								
Austria, Carinthia	np	np	np	np	0.36 (0.19 to 0.66)	0.001	1.23 (0.70 to 2.16)	0.481
India, New Delhi	0.24 (0.18 to 0.32)	<0.001	6.97 (5.80 to 8.38)	<0.001	1.99 (1.24 to 3.20)	0.005	3.00 (1.35 to 6.68)	0.007