

# To what extent is alcohol consumption in social gatherings associated with observance of COVID-19 restrictions?: A rapid review

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**Title:** To what extent is alcohol consumption in social gatherings associated with observance of COVID-19 restrictions?

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# Purpose of the review:

SARS-CoV-2 continues to spread globally with 198,022,041 confirmed cases and 4,223,460 deaths, as on 2<sup>nd</sup> August 2021 (World Health Organisation, 2021a). The world continues to grapple with producing effective vaccines and vaccination strategies; however, this effort has been impeded by emerging variants as seen from the global case numbers (Rubin, 2021). Therefore, non-pharmacological interventions such as physical distancing and hygiene measures continue to be at the forefront of mitigation efforts (World Health Organisation, 2021b). However, these behavioural regulations are often not adhered to, which can have a substantial negative impact on mitigation efforts. Consequently, identifying factors that are barriers or facilitators of adherence are crucial to enhancing the effectiveness of these measures (Coroiu et al., 2020).

A better understanding of the association between alcohol consumption, particularly at social gatherings, and observance of COVID-19 restrictions is needed to inform policy related to safe reopening of public spaces. This report aims to summarise and assess the quality of available evidence at the time of writing on links between alcohol consumption at social gatherings and observance of COVID-19 rules such as physical distancing, facial covering, and hand washing.

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#### **Methods:**

This rapid review was guided by the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA-2020) protocols statement (Page et al., 2021). We produced a study protocol for this rapid review and registered it on Prospero (CRD42021265206) (Kulkarni et al., 2021).

# Search strategy

We developed a search strategy by combining three search strings that included terms relating to COVID-19, alcohol, and non-pharmacological interventions (NPIs). We identified initial search terms from indicator papers derived from our scoping searches. We searched English language studies in the following databases: MEDLINE, PubMed, CINAHL, Scopus, Embase (Ovid), ProQuest Public Health, ProQuest Coronavirus, Global Health (Ovid), WHO COVID-19 literature database, PsycInfo (Ovid), and Applied Social Sciences Index and Abstracts (ASSIA).

The draft search strategy was piloted in each database and then finalised. Searches were conducted on 2021/07/09 for all databases except PubMed and ProQuest Coronavirus (both 2021/07/13), ASSIA (2021/07/14) and Scopus (2021/07/30). We also undertook a search in PreVIEW: COVID-19 (2021/07/27) and reviewed potential websites (2021/07/27) offering specific advice with respect to alcohol consumption during the COVID-19 pandemic. The final search strategies used in each database and the results identified via the PreVIEW: COVID-19 search, and website reviews are provided in the appendix.

# Screening and selection of studies

De-duplication of retrieved records was conducted first in Endnote, and then in the Automated Systematic Search Deduplication Tool (ASySD) (Hair et al., 2021). ASySD automatically removed clear duplicates and suggested potential duplicates for manual screening and deduplication. This process was carried out before importing the data set into the systematic review system, Covidence. Covidence performed a further deduplication in advance of the reviewer team starting work. The reviewer team performed independent double-reviewer title and abstract screening of retrieved records. Similarly, the selected full text papers were also independently reviewed by two reviewers. Disagreements at any stage were resolved by discussion between the team members. Our inclusion and exclusion criteria are outlined in table 1. The title and abstract screening stage indicated that there would be limited relevant evidence. As a result, at the full text screening stage, we did not exclude studies if the setting of alcohol consumption was not mentioned.

Table 1: Criteria for study selection							
	Inclusion	Exclusion					
Population	<ul> <li>People consuming alcohol in social gatherings (for example, in bars, pubs, restaurants, parties, house parties)</li> </ul>	Studies recruiting alcohol non-drinkers, wherein alcohol non-drinkers do not constitute the control group					

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	<ul> <li>Studies recruiting alcohol non-drinkers will be included if non-drinkers constitute a control group</li> </ul>	
Exposure	Alcohol consumption/ alcohol drinking in social gatherings	No alcohol consumption/ alcohol drinking
Comparator	No consumption of alcohol or consumption of a different amount of alcohol	Single group studies (studies without a comparator group)
Outcome	Observance of COVID-19 rules	COVID-19 outcomes like disease incidence, severity, clinical features, ICU admissions, mortality, etc.
Setting*	Social gatherings where alcohol is consumed as in pubs, bars, parties, barbecues, etc.	Alcohol consumption alone or within a single household
Study design	<ul> <li>Observational epidemiological studies including cross-sectional and longitudinal studies</li> <li>Intervention studies like randomised control trials or quasi experimental studies</li> </ul>	<ul> <li>Qualitative studies</li> <li>Systematic reviews, literature reviews</li> <li>Summaries, viewpoints, newspaper articles and, commentaries</li> </ul>
Geographical	Studies conducted in any	No geographical restrictions
location	country or countries	applied
Language	Studies published in English language	Studies published in language other than English

<sup>\*</sup>The criterion for setting was disregarded after the title and abstract screening stage as we were dealing with extremely limited evidence. No studies had been excluded at the title and abstract screening stage because of the setting/s.

# Data extraction and management

We piloted our data extraction form by using it for potentially relevant and randomly selected studies that were identified by our initial scoping searches. We performed data extraction in MS Excel. For each paper, two reviewers independently extracted data. Any disagreements were resolved by discussions between the team members. We extracted data on study characteristics (first author, year published, study title, country, study design, setting, NPIs addressed, whether data were self-reported, method of data collection, total number of participants, number of males and percentage of male participants, mean age of participants) and study findings (measures of effect, definition of exposed group, definition of control group, number of participants in the exposed group, number of participants in the control group, effect estimate, 95% confidence intervals, p value).

#### Risk of bias assessment

The Joanna Briggs Institute (JBI) checklists were utilised for quality assessment of included

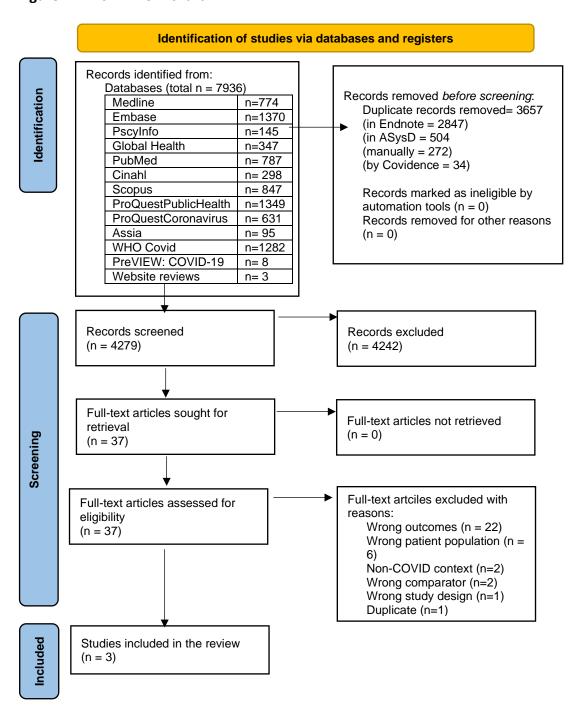
studies (Joanna Briggs Institute, 2020). We modified the second and fourth items to emphasise their relations to the alcohol consumption context. We applied the suitable checklist depending on the study design for each study. Independent quality assessment was performed by two reviewers for each included study and discrepancies were resolved by discussion. Due to limited availability of evidence and to ensure maximal comprehensiveness, this review did not exclude any studies on the grounds of poor quality.

# Data synthesis

A narrative synthesis of findings was undertaken owing to limited availability of evidence and dissimilar measures of effect in different studies.

#### **Results:**

Figure 1: PRISMA flow-chart



# Study selection

Figure 1 shows the flow of studies at every stage. A total of three studies were included in this rapid review (Einberger et al., 2021, Hosen et al., 2021, Peixoto et al., 2020).

# Characteristics of included papers

All the included studies were cross-sectional in nature. The study characteristics are summarised in table 2.

**Table 2: Characteristics of included studies** 

First author (year)	Country	Context of drinking	Data collection period	NPIs in place during data collection	Data collection method	Method of estimation of alcohol consumption	Sample size	Number of males (%)	Participant age	Covariates adjusted for
Einberg er (2021)	USA	alone; with others online; with others in-person	21 April 2020- 18 May 2020	Data were collected during the Washington state-wide "Stay Home, Stay Healthy" order that prohibited leaving the house or participating in social gatherings of any kind (Inslee, 2020)	self- reported responses to an online survey	daily drinking questionnaire to collect data on daily number of drinks. Heavy episodic drinking defined as ≥4 drinks for women, ≥5 drinks for men	560	216 (38.57%)	22 to 28 years (mean= 25.09 years)	did not adjust for socio- demographic variables; however, the extent of weekly drinking by every individual was accounted for in the analysis of the estimation of association between drinking in specific contexts (drinking alone, with others virtually, and with others in-person) and NPI compliance.
Hosen (2021)	Banglade sh	unclear	1 April 2020- 10 April 2020	Bangladesh was approximately one month into a two month rapidly executed lockdown that quickly transitioned into general recommendations surrounding distancing and mask wearing	self- reported responses to an online survey	binary question regarding alcohol drinking (yes/no)	10,067	5650 (56.1%)	≥ 20 years (skewed younger)	age, sex, education level, marital status, and place/region of residence, occupation, smoking status, and current health status

First author (year)	Country	Context of drinking	Data collection period	NPIs in place during data collection	Data collection method	Method of estimation of alcohol consumption	Sample size	Number of males (%)	Participant age	Covariates adjusted for
				when in public (Shawon 2020)						
Peixoto (2020)	Brazil	unclear	26 May 2020- 8 June 2020	Stay-at-home order in place, barring leaving the house except for essentials. Facemasks required outside the home (Hannah et al., 2020)	self- reported responses to a telephone- based survey	-Low risk: ≤7 (female) ≤14 (male) doses/week <sup>†</sup> -High risk >7 (female) > 14 (male) doses/week -Non- consumption <1 dose/week	5,827	2634 (45.2%)	≥ 50 years	age, sex, education level, marital status, and place/region of residence, skin colour, number of residents in household, and number of self-reported chronic conditions

<sup>‡:</sup> any drink that contains about 0.6 fluid ounces or 14 grams of pure alcohol

The setting or context of drinking was unspecified in two studies (Hosen et al., 2021, Peixoto et al., 2020); therefore, it was unclear if participants recruited in these studies consumed alcohol alone, with others (in bars, pubs, gardens, at home, weddings, sporting events, etc.) or with others virtually. The study by Einberger et al. (2021) reported if participants consumed alcohol alone, with others online or with others in-person. However, data regarding the exact place (home, gardens, sporting events, restaurants, etc.) were not collected.

# Association between alcohol consumption and NPI compliance

The findings of each study are summarised in table 3.

# Einberger et al. 2021

It was observed that strong adherers to physical distancing engaged in about 40% less weekly drinks than poor adherers (p< 0.01) and strong adherers to physical distancing were involved in about 60% less heavy episodic drinking occasions in a week (p< 0.01). In terms of the context of drinking, strong physical distancing adherers were more likely than poor adherers to engage in drinking with others virtually compared to drinking with others in-person (beta= 0.38). Non-significant differences were noted with respect to drinking in isolation or drinking with others in-person.

#### Hosen et al. 2021

The association between alcohol drinking with preventive COVID-19 behaviours estimated by linear regression analysis was observed to be statistically insignificant. (beta= 1.14; 95% CI= 0.79- 1.50). The following preventive COVID-19 behaviours were analysed together-frequency of cleaning hands with an alcohol-based hand rub, mouth and face covering while coughing and sneezing, maintaining at least 1m physical distance between yourself and anybody who is coughing or sneezing, and staying home if unwell.

#### Peixoto et al. 2020

The low-risk alcohol consumption group had a higher chance of adhering to hand hygiene than those who reported high-risk alcohol consumption (OR= 4.24; 95% CI= 1.08- 16.64). The results were statistically insignificant for differences in staying at home and mask wearing between the high risk, low risk and non-consumer groups. However, the precise p-values for these analyses were not reported.

**Table 3: Study findings** 

First author (year)	Outcome measured	Total number of participants	Definition of the exposed group	Definition of the control group	Number of participa nts in the exposed group	Number of participa nts in the control group	Measures of effect	Effect estimate	Upper limit of 95% CI	Lower limit of 95% CI	p-value
Einber ger (2021)	physical distancing behaviour in people drinking in isolation	unclear	self- reported strong adherers	self- reported poor adherers	unclear	unclear	b (S.E.)	-0.04 (0.14)	unclear	unclear	statisticall y insignifica nt (exact value unclear)
	physical distancing behaviour in people drinking with others online	unclear	self- reported strong adherers	self- reported poor adherers	unclear	unclear	b (S.E.)	0.38 (0.15)	unclear	unclear	<0.01
	physical distancing behaviour in people drinking with others in- person	unclear	self- reported strong adherers	self- reported poor adherers	unclear	unclear	b (S.E.)	-0.09 (0.18)	unclear	unclear	statisticall y insignifica nt (exact value unclear)
	associatio n of physical distancing behaviour	unclear	self- reported strong adherers	self- reported poor adherers	unclear	unclear	rate ratio calculate d by negative binomial	0.61	0.44	0.82	<0.01

First author (year)	Outcome measured	Total number of participants	Definition of the exposed group	Definition of the control group	Number of participa nts in the exposed group	Number of participa nts in the control group	Measures of effect	Effect estimate	Upper limit of 95% CI	Lower limit of 95% CI	p-value
	and weekly number of drinks						regressio n model				
	associatio n of physical distancing behaviour and weekly heavy episodic drinking	unclear	self- reported strong adherers	self- reported poor adherers	unclear	unclear	rate ratio calculate d by negative binomial regressio n model	0.39	0.21	0.72	<0.01
Hosen (2021)	preventiv e COVID- 19 behaviour s	10,067	alcohol non- consumers	alcohol consumers	267	9800	b (S.E.)	1.14 (0.18)	unclear	unclear	unclear
Peixot o (2020)	physical distancing	5827	low- and high-risk alcohol consumers	non- consumers of alcohol	1270 in exposed group	4557 in control	OR	high risk: 1.00 low risk: 0.76 control: 1.61	low risk: 1.56 control: 2.64	low risk: 0.37 control: 0.98	unclear

First author (year)	Outcome measured	Total number of participants	Definition of the exposed group	Definition of the control group	Number of participa nts in the exposed group	Number of participa nts in the control group	Measures of effect	Effect estimate	Upper limit of 95% CI	Lower limit of 95% CI	p-value
	mask wearing	5827	low- and high-risk alcohol consumers	non- consumers of alcohol	1271 in exposed group	4558 in control	OR	high risk: 1.00 low risk: 0.59 control: 0.94	low risk: 4.03 control: 1.95	low risk: 0.09 control: 0.45	unclear
	hand hygiene	5827	low- and high-risk alcohol consumers	non- consumers of alcohol	1272 in exposed group	4559 in control	OR	high risk: 1.00 low risk: 4.24 control: 1.83	low risk: 16.64 control: 4.18	low risk: 1.08 control: 0.8	unclear

# Quality assessment of included studies

The quality assessment results of the included studies are summarised in table 2.

Table 2: Quality assessment of included studies using the modified JBI quality appraisal checklist for cross-sectional studies

Study	Einberger	Hosen	Peixoto
Questions	2021	2021	2020
1. Were the criteria for inclusion in the sample clearly			
defined?	yes	no	yes
2. Were the study subjects and the setting (in which			
alcohol consumption occurred) described in detail?	yes	no	no
3. Was the exposure measured in a valid and reliable			
way?	no	no	no
4. Were objective, standard criteria used for			
measurement of the condition (alcohol consumption in			
this case)?	yes	no	yes
5. Were confounding factors identified?	yes	yes	yes
6. Were strategies to deal with confounding factors			
stated?	yes	yes	yes
7. Were the outcomes measured in a valid and reliable			
way?	no	no	no
8. Was appropriate statistical analysis used?	yes	yes	yes
Overall	6/8	3/8	5/8

#### **Discussion:**

This rapid review was undertaken to analyse and appraise evidence on the association between alcohol drinking in social gatherings and NPI compliance to guide informed reopening policies in the COVID-19 pandemic context. We did not find any studies specifically focusing on alcohol consumption in social gatherings. Among the three studies included in this review, two studies found that an increase in the quantity of alcohol consumed was associated with NPI non-compliance: hand hygiene (Peixoto et al., 2020) and physical distancing (Einberger et al., 2021). However, findings from another study (Hosen et al. 2021) and for other NPIs reported in the Peixoto et al. (2020) study showed non-significant association between alcohol drinking and NPI compliance. The strength of association between alcohol consumption in social gatherings and observance of COVID-19 restrictions remains unknown because of the unspecified context of drinking in the included studies.

# Evidence from the pre-COVID context

Research that has taken place before the onset of the COVID-19 pandemic has established a connection between alcohol and the reduction of physical distancing between strangers (Gurrieri et al., 2021). Both the physical lay-out of traditional spaces where alcohol is consumed, such as bars and restaurants, and the psychological effects of alcohol on the brain encourage social interaction with strangers (Fairbairn et al., 2018, Fairbairn and Sayette, 2014). Unfortunately, within the context of an infectious disease outbreak this

combination can facilitate the transmission of respiratory illness (Gurrieri et al., 2021).

### Risky health behaviours

Peixoto et al. (2020) show that those who meet the government recommended levels for healthy physical activity and those who do not smoke, in addition to those with low-risk alcohol habits, are more likely to report adherence to COVID-19 related NPIs. Hosen et al. (2021) also demonstrated that both non-smokers and those who do not consume alcohol had higher levels of adherence. This maps on to other studies that attempt to draw connections between individual behavioural characteristics as predictors of NPI adherence, such as by Fendrich et al. (2021) who found that alcohol and drug use consistently served as negative predictors of adherence to both physical distancing and personal hygiene measures. Papageorge et al. (2021) used nation-wide data across the United States to measure adherence to healthy behaviours, both prior to and during the COVID-19 pandemic. A significant negative association was found between heart disease and an increase in social distancing adherence which could be used to make the argument that those who tend to follow unhealthy lifestyles (if heart disease can be taken as a proxy for such lifestyles) may be expected to engage in fewer self-protective behaviours during a pandemic (Papageorge et al., 2021). Additionally, it was found that very few participants showed a net decline in protective behaviours (such as physical distancing and mask wearing) during the pandemic: either no change at all was recorded or individuals increased adherence significantly (Papageorge et al., 2021).

#### Time factor

Another important factor to consider is the relationship between time and adherence to NPIs. COVID-fatigue is a colloquial term used to describe feelings of burnout and exhaustion in response to following COVID-19 guidelines. A study from the United States found that every region experienced a reduction in overall NPI adherence rates such that the highest rates were recorded in early April and the lowest in late November of 2020, with social distancing behaviours showing the largest difference (Crane et al., 2021). As all three studies included in this review were cross-sectional in design with data being collected between April 2020 and June 2020 it is possible that the levels of adherence represented were higher than would be expected of studies conducted later.

#### Limitations

Data on alcohol consumption and compliance to different NPIs were collected via online surveys in all studies (Einberger et al., 2021, Hosen et al., 2021, Peixoto et al., 2020). This data collection strategy did not come as a surprise considering the context of the ongoing pandemic. However, it raised concerns regarding the validity and reliability of measurement; particularly in contexts such as Bangladesh (Hosen et al., 2021), where social acceptability of alcohol drinking is low, potentially affecting the reliability of self-reported data. Another drawback of recruiting participants via online surveys is the introduction of selection bias. Selection bias resulting from limited access to internet services may be particularly pertinent to the low- and middle-income country settings like Bangladesh and Brazil (Hosen et al., 2021, Peixoto et al., 2020). Moreover, Hosen et al. (2021) grouped several COVID-19 protective behaviours together and estimated the compliance to all these

as a single outcome. It is doubtful whether a single measure to estimate compliance to a wide variety of NPIs is meaningful because every individual may show different degrees of compliance to different NPIs.

It is also important to note that the governments in different countries imposed different combinations of restrictions at different times during the pandemic. This challenges our ability to generalise the findings of this review across different settings.

The overall quality of the evidence from this rapid review is very low. Limited existing evidence reflects the fact that the situation we are currently facing is unique. The occurrence of mass closures over prolonged periods and across many nations is rare. Finding only a few studies also limited our ability to compare differences between different agegroups, education level, urban-rural settings etc. which can show differential drinking behaviours and NPI compliance patterns. Qualitative studies that can explore the social and behavioural aspects to supplement quantitative research were excluded. Social drinking is extremely common in some cultures and countries, including the UK. More research from such specific contexts is warranted to guide informed re-opening policies.

#### Direction for future research

The evolution of alcohol-related behaviours during the pandemic needs to be monitored and how this might affect compliance with public health COVID-19 mitigations particularly. Studies conducted in the UK and based on directly observed behaviour rather than self-reported behaviour, and where alcohol consumption and NPI compliance are measured in real-time, are warranted. Such evidence will enable public health experts and policymakers to evaluate if there exists a direction of effect and a dose-response relationship between alcohol consumption and NPI compliance. More research on effective public health messaging targeting individuals likely to engage in risky behaviours will also help to inform strategies for promoting adherence to pandemic-related safety measures.

#### Implications for policy and practice

As there is limited information on the context in which drinking took place and the quality of existing evidence is low, it is difficult to directly link these findings to planning for the reopening of bars, pubs, restaurants, etc. It is important to bear this aspect in mind when reopening places where alcoholic drinks are commonly consumed.

#### **Conclusions:**

There is extremely limited evidence focussing on the association of alcohol drinking in social gatherings and NPI compliance during the COVID-19 pandemic. Our review found an association between alcohol drinking in non-specific settings and non-compliance to certain NPI measures. Limited evidence suggests that poor adherers and strong adherers to physical distancing showed a similar likelihood of engaging in drinking with others in-person. However, the direction of effect and effect of confounding factors remains unexplored. Moreover, the evidence was non-specific to the UK context and the quality of included studies was low to moderate. Further research in this behavioural field of the COVID-19 pandemic is encouraged.

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**Appendix: Search terms** 

ASSIA (PROQUEST) 2021-07-14

#### Results: 95

(((([STRICT] SU("Alcoholic Beverages" OR "Binge Drinking" OR "Alcohol Drinking" OR "Alcoholic Intoxication")) OR ([STRICT] NOFT(wine\* OR beer\* OR lager\* OR spirits OR whisky OR whiskey)) OR ([STRICT] NOFT(alcohol OR "binge drinking" OR "alcoholic beverage" OR "alcoholic beverages" OR "alcoholic drink" OR "alcoholic drinking" OR "alcoholic drinks")) OR ([STRICT] NOFT(drunk OR drunks OR drunken\* OR intoxicat\* OR inebriat\*))) OR (([STRICT] NOFT(social\* OR alone OR house\* OR home\* OR garden\* OR park\* OR terrace\* OR pub OR pubs OR bar OR bars OR shebeen\* OR tavern\* OR cafe\* OR restaurant\* OR hotel\* OR hospitality OR venue\* OR gig OR gigs OR concert OR concerts OR club OR clubs OR nightclub\* OR saloon\* OR bistro\* OR lounge\* OR domestic OR ("waiting room" OR "waiting rooms") OR campus\* OR ("student hall" OR "student halls") OR "hall of residence" OR "halls of residence" ("residence hall" OR "residence halls") OR ("student union" OR "student unions") OR party OR parties OR celebrat\* OR gathering\* OR outside OR inside OR road\* OR street\* OR festiv\* OR football OR sport\* OR event OR events OR funeral\* OR wake\* OR wedding\* OR ((("stag night\*"))) OR ((("hen night\*"))) OR barbeque\* OR friend\* OR picnic\* OR socializ\* OR socialis\* OR lifestyle)) AND ([STRICT] NOFT(drink\*)))) AND (([STRICT] NOFT((covid NEAR/3 complian\*) OR restrict\* OR mitigation\* OR measures OR shielding OR ("face shield" OR "face shields") OR ("face covering" OR "face coverings") OR "N95 respirator\*" OR (mask\* NEAR/2 wear\*) OR (hand NEAR/3 (washing OR wash OR sanitiz\* OR sanitis\*)) OR hygien\* OR distanc\* OR "lateral flow" OR NPI\* OR "non pharmaceutical intervention\*" OR "nonpharmaceutical intervention\*" OR "non pharmacological intervention\*" OR "nonpharmacological intervention\*")) OR ([STRICT] NOFT(contact NEAR/3 tracing)) OR ([STRICT] NOFT(track NEAR/2 trace)) OR ([STRICT] NOFT("check in" OR "check out")) OR ([STRICT] NOFT((infect\* OR disease\*) NEAR/2 (prevent\* OR control\*))) OR ([STRICT] SU("Communicable Disease Control" OR "Contact Tracing" OR "Physical Distancing" OR "Quarantine" OR "Masks" OR "N95 Respirators" OR "Ventilation")) OR ([STRICT] NOFT("stay at home" OR lockdown\* OR quarantin\* OR confinement\* OR isolat\* OR ventilation)))) AND (([STRICT] SU(Coronavirus OR Betacoronavirus OR Coronavirus Infections OR COVID-19 OR SARS-CoV-2)) OR (STRICT NOFT("Wuhan seafood market pneumonia virus")) OR (STRICT NOFT(2019nCoV OR Betacoronavirus\* OR Corona Virus\* OR Coronavirus\* OR Coronovirus\* OR CoV OR CoV2 OR COVID OR COVID19\* OR COVID-19\* OR COVID-2019\* OR HCoV-19 OR nCoV OR SARS2 OR SARSCOV OR SARS-CoV OR 2019-nCoV-19 OR SARS-CoV-2 OR SARS CoV 2 OR SARS-CoV-2019)))

# CINAHL 2020-07-09 Results: 298

Unqualified search for free text, searching the following fields: Title, Abstract, Subject headings, PubMed ID (PMID), Digital Object Identifier (DOI). Author

- S21 S18 and S19 and S20
- S20 S1 or S2 or S3 or S4 or S5 or S6 or S7 or S8 or S9 or S10
- S19 S11 or S12 or S13 or S14 or S15 or S16 or S17
- S18 ((MH "Coronavirus Infections") or (MH "Coronavirus") or (MH "COVID-19") or (MH "SARS-CoV-2")) or ("Wuhan seafood market pneumonia

virus" or 2019nCoV or Betacoronavirus\* or "Corona Virus\*" or Coronavirus\* or CoV or CoV2 or COVID or COVID19\* or "CO VID-19\*" or "COVID-2019\*" or "HCoV-19" or nCoV or SARS2 or SARSCoV or "SARS-CoV" or "2019-nCoV-19" or "SARS-CoV-2" or "SARS CoV 2" or "SARS-CoV-2019")

- S17 (MH "Alcohol Drinking+")
- S16 (MH "Alcoholic Beverages+")
- S15 "wine\* or beer\* or lager\* or spirits or whiskey or whisky"
- S14 (MH "Alcoholic Intoxication")
- S13 alcohol or "binge drinking" or "alcoholic beverage\*" or "alcoholic drink\*"
- S12 drunk or drunks or drunken\* or intoxicat\* or inebriat\*
- S11 ((drink\*) and (social\* or alone or house\* or home\* or garden\* or park\* or terrace\* or pub or pubs or bar or bars or shebeen\* or tavern\* or cafe\* or restaurant\* or hotel\* or hospitality or venue\* or gig or gigs or concert or concerts or club or clubs or nightclub\* or saloon\* or bistro\* or lounge\* or domestic or "waiting room\*" or campus\* or "student hall\*" or "hall of residence" or "halls of residence" or "residence hall\*" or "student union\*" or party or parties or celebrat\* or gathering\* or outside or inside or road\* or street\* or festiv\* or football or sport\* or event or events or funeral\* or wake\* or wedding\* or "stag night\*" or "hen night\*" or barbeque\* or friend\* or picnic\* or socializ\* or socialis\* or lifestyle)
- S10 (MH "Handwashing") or (MH "Contact Tracing") or (MH "Infection Control")
  - S9 (MH "Social Distancing") or (MH "Stay-at-Home Orders") or (MH "Quarantine")

(MH "Masks") or (MH "N95 Respirators") or (MH "Respiratory Protective Devices") S8

- S7 shielding or "face-shield\*" or "mask-wearing" or "face-covering\*" or (mask\* N2 wear\*) or "N95 respirator\*"
- S6 (covid N3 complian\*) or (restrict\* or mitigation\* or measures or (hand N3 (washing or wash or sanitiz\* or sanitis\*)) or hygien\* or distanc\* or lateral flow or NPI\* or "nonpharmaceutical intervention\*" or "non-pharmaceutical intervention\*" or "nonpharmacological intervention"
- S5 (contact N3 tracing) or (track N2 trace) or "check-in" or "check-out"
- S4 (infect\* or disease\*) N2 (prevent\* or control\*)
- S3 "stay-at-home" or lockdown\* or confinement\* or quarantin\* or isolat\* or "self-isolat\*"
- S2 (MH "Ventilation")
- S1 ventilation

[Text Wrapping Break]

Coronavirus (PROQUEST) 2021-07-13

#### Results: 631

((([STRICT] SU("Alcoholic Beverages" OR "Binge Drinking" OR "Alcohol Drinking" OR "Alcoholic Intoxication")) OR ([STRICT] NOFT(wine\* OR beer\* OR lager\* OR spirits OR whisky OR whiskey)) OR ([STRICT] NOFT(alcohol OR "binge drinking" OR "alcoholic beverage" OR "alcoholic beverages" OR "alcoholic drink" OR "alcoholic drinking" OR "alcoholic drinks")) OR ([STRICT] NOFT(drunk OR drunks OR drunken\* OR intoxicat\* OR inebriat\*))) OR (([STRICT] NOFT(social\* OR alone OR house\* OR home\* OR garden\* OR park\* OR terrace\* OR pub OR pubs OR bar OR bars OR shebeen\* OR tavern\* OR cafe\* OR restaurant\* OR hotel\* OR hospitality OR venue\* OR gig OR gigs OR concert OR concerts OR club OR clubs OR nightclub\* OR saloon\* OR bistro\* OR lounge\* OR domestic OR ("waiting room" OR "waiting rooms") OR campus\* OR ("student hall" OR "student halls") OR "hall of residence" OR "halls of residence" OR ("residence hall" OR "residence halls") OR ("student union" OR "student unions") OR party OR parties OR celebrat\* OR gathering\* OR outside OR inside OR road\* OR street\* OR festiv\* OR football OR sport\* OR event OR events OR funeral\* OR wake\* OR wedding\* OR ((("stag night\*"))) OR ((("hen night\*"))) OR barbeque\* OR friend\* OR picnic\* OR socializ\* OR socialis\* OR lifestyle)) AND ([STRICT] NOFT(drink\*)))) AND (([STRICT] NOFT((covid NEAR/3 complian\*) OR restrict\* OR mitigation\* OR measures OR shielding OR ("face shield" OR "face shields") OR ("face covering" OR "face coverings") OR "N95 respirator\*" OR (mask\* NEAR/2 wear\*) OR (hand NEAR/3 (washing OR wash OR sanitiz\* OR sanitis\*)) OR hygien\* OR distanc\* OR "lateral flow" OR NPI\* OR "non pharmaceutical intervention\*" OR "nonpharmaceutical intervention\*" OR "non pharmacological intervention\*" OR "nonpharmacological intervention\*")) OR ([STRICT] NOFT(contact NEAR/3 tracing)) OR ([STRICT] NOFT(track NEAR/2 trace)) OR ([STRICT] NOFT("check in" OR "check out")) OR ([STRICT] NOFT((infect\* OR disease\*) NEAR/2 (prevent\* OR control\*))) OR ([STRICT] SU("Communicable Disease Control" OR "Contact Tracing" OR "Physical Distancing" OR "Quarantine" OR "Masks" OR "N95 Respirators" OR "Ventilation")) OR ([STRICT] NOFT("stay at home" OR lockdown\* OR quarantin\* OR confinement\* OR isolat\* OR ventilation)))

Embase (Ovid) Embase <1980 to 2021 Week 26> 2021-07-09 Results: 1370

- 1 drinking behavior/
- 2 exp alcoholic beverage/
- 3 (wine\* or beer\* or lager\* or whisky or spirits).mp.
- 4 binge drinking/ or exp alcohol intoxication/ or exp alcohol consumption/
- 5 (alcohol or binge drinking or alcoholic beverage\* or alcoholic drink\*).mp.
- 6 (drunk or drunks\* or drunken\* or intoxicat\* or inebriat\*).mp.
- 7 (drink\* and (social\* or alone or house\* or home\* or garden\* or park\* or terrace\* or pub or pubs or bar or bars or shebeen\* or tavern\* or cafe\* or restaurant\* or hotel\* or hospitality or venue\* or gig or gigs or concert or concerts or club or clubs or nightclub\* or saloon\* or bistro\* or lounge\* or domestic or waiting room\* or campus\* or student hall\* or "hall\* of residence" or residence hall\* or student union\* or party or parties or celebrat\* or gathering\* or outside or inside or road\* or street\* or festiv\* or football or sport\* or event or

events or funeral\* or wake\* or wedding\* or stag night\* or hen night\* or barbeque\* or friend\* or picnic\* or socializ\* or socialis\* or lifestyle)).mp.

8 Coronavirus Infection/ or Coronavirus Disease 2019/ or Coronavirinae/ or Betacoronavirus/ or exp Severe acute respiratory syndrome coronavirus 2/

9 Wuhan seafood market pneumonia virus

10 (2019nCoV or Betacoronavirus\* or Corona Virus\* or Coronavirus\* or Covor CoV2 or COVID or COVID19\* or COVID-19\* or COVID-2019\* or HCoV-19 or nCoV or SARS2 or SARSCoV or SARS-CoV or 2019-nCoV-19 or SARS-CoV-2 or SARS CoV 2 or SARS-CoV-2019).mp.

- 11 communicable disease control/ or exp quarantine/ or social distancing/
- 12 exp mask/
- 13 (shielding or face shield\* or face covering\* or n95 respirator\* or (mask\* adj2 wear\*)).mp.
- 14 ((covid adj3 complian\*) or (restrict\* or mitigation\* or measures) or (hand adj3 (washing or wash or sanitiz\* or sanitis\*)) or hygien\* or distanc\* or lateral flow or NPI\* or non pharmaceutical intervention\* or nonpharmaceutical intervention\* or nonpharmacological intervention\*).mp.
- 15 ((contact adj3 tracing) or (track adj2 trace) or check in or check out).mp.
- 16 ((infect\* or disease\*) adj2 (prevent\* or control\*)).mp.
- 17 (stay-at-home or lockdown\* or quarantin\* or confinement\* or isolat\*).mp.
- 18 ventilation.mp.

19 or/1-7

20 8 or 9 or 10

21 or/11-18

22 19 and 20 and 21

Global Health (Ovid) Results: 2021-07-09

Results: 347

- 1 alcohol intake/
- 2 exp alcoholic beverages/
- 3 (wine\* or beer\* or lager\* or whisky or whiskey or spirits).mp.
- 4 (alcohol or binge drinking or alcoholic beverage\* or alcoholic drink\*).mp.
- 5 (drunk or drunks\* or drunken\* or intoxicat\* or inebriat\*).mp.
- 6 public houses/
- 7 (drink\* and (social\* or alone or house\* or home\* or garden\* or park\* or terrace\* or pub or pubs or bar or bars or shebeen\* or tavern\* or cafe\* or restaurant\* or hotel\* or hospitality or venue\* or gig or gigs or concert or concerts or club or clubs or nightclub\* or saloon\* or bistro\* or lounge\* or domestic or waiting room\* or campus\* or student hall\* or "hall\* of residence" or residence hall\* or student union\* or party or parties or celebrat\* or gathering\* or outside or inside or road\* or street\* or festiv\* or football or sport\* or event or events or funeral\* or wake\* or wedding\* or stag night\* or hen night\* or barbeque\* or friend\* or picnic\* or socializ\* or socialis\* or lifestyle)).mp.
- 8 Betacoronavirus/ or Human Coronaviruses/ or exp severe acute respiratory syndrome-related coronavirus/

- 9 (Wuhan seafood market pneumonia virus).mp.
- 10 (2019nCoV or Betacoronavirus\* or Corona Virus\* or Coronavirus\* or Coronovirus\* or CoV or CoV2 or COVID or COVID19\* or COVID-19\* or COVID-2019\* or HCoV-19 or nCoV or SARS2 or SARSCoV or SARS-CoV or 2019-nCoV-19 or SARS-CoV-2 or SARS CoV 2 or SARS-CoV-2019).mp.
- 11 masks/
- 12 (shielding or face shield\* or face covering\* or n95 respirator\* or (mask\* adj2 wear\*)).mp.
- 13 ((covid adj 3 complian\*) or (restrict\* or mitigation\* or measures) or (hand adj3 (washing or wash or sanitiz\* or sanitis\*)) or hygien\* or distanc\* or lateral flow or NPI\* or non pharmaceutical intervention\* or nonpharmaceutical intervention\* or nonpharmacological intervention\*).mp.
- 14 ((contact adj3 tracing) or (track adj2 trace) or check in or check out).mp.
- 15 infection control/ or contact tracing/ or quarantine/
- 16 ((infect\* or disease\*) adj2 (prevent\* or control\*)).mp.
- 17 (stay-at-home or lockdown\* or quarantin\* or confinement\* or isolat\*).mp.
- 18 ventilation/ or natural ventilation/ or ventilation.mp.
- 19 or/1-7
- 20 8 or 9 or 10
- 21 or/11-18
- 22 19 and 20 and 21

Page Break

#### **MEDLINE (Ovid)**

Ovid MEDLINE(R) and Epub Ahead of Print, In-Process, In-Data-Review & Other Non-Indexed Citations, Daily and Versions(R) <1946 to July 08, 2021> 2021-07-09

Results: 774

- 1 exp Alcohol Drinking/
- 2 exp Alcoholic Beverages/
- 3 (wine\* or beer\* or lager\* or spirits or whisky or whiskey).mp.
- 4 alcoholic intoxication/ or binge drinking/
- 5 (alcohol or binge drinking or alcoholic beverage\* or alcoholic drink\*).mp.
- 6 (drunk or drunks\* or drunken\* or intoxicat\* or inebriat\*).mp.
- 7 (drink\* and (social\* or alone or house\* or home\* or garden\* or park\* or terrace\* or pub or pubs or bar or bars or shebeen\* or tavern\* or cafe\* or restaurant\* or hotel\* or hospitality or venue\* or gig or gigs or concert or concerts or club or clubs or nightclub\* or saloon\* or bistro\* or lounge\* or domestic or waiting room\* or campus\* or student hall\* or "hall\* of residence" or residence hall\* or student union\* or party or parties or celebrat\* or gathering\* or outside or inside or road\* or street\* or festiv\* or football or sport\* or event or events or funeral\* or wake\* or wedding\* or stag night\* or hen night\* or barbeque\* or friend\* or picnic\* or socializ\* or socialis\* or lifestyle)).mp.
- 8 Coronavirus/ or Betacoronavirus/ or Coronavirus Infections/ or COVID-19/ or SARS-CoV-2/
- 9 Wuhan seafood market pneumonia virus.mp.
- 10 (2019nCoV or Betacoronavirus\* or Corona Virus\* or Coronavirus\* or Coronovirus\* or

CoV or CoV2 or COVID or COVID19\* or COVID-19\* or COVID-2019\* or HCoV-19 or nCoV or SARS2 or SARSCoV or SARS-CoV or 2019-nCoV-19 or SARS-CoV-2 or SARS CoV 2 or SARS-CoV-2019).mp.

- 11 communicable disease control/ or contact tracing/ or physical distancing/ or quarantine/
- 12 masks/ or n95 respirators/
- 13 (shielding or face shield\* or face covering\* or n95 respirator\* or (mask\* adj2 wear\*)).mp.
- 14 ((covid adj 3 complian\*) or (restrict\* or mitigation\* or measures) or (hand adj3 (washing or wash or sanitiz\* or sanitis\*)) or hygien\* or distanc\* or lateral flow or NPI\* or non pharmaceutical intervention\* or nonpharmaceutical intervention\* or nonpharmacological intervention\*).mp.
- 15 ((contact adj3 tracing) or (track adj2 trace) or check in or check out).mp.
- 16 ((infect\* or disease\*) adj2 (prevent\* or control\*)).mp.
- 17 (stay-at-home or lockdown\* or quarantin\* or confinement\* or isolat\*).mp.
- 18 Ventilation/ or ventilation.mp.
- 19 or/1-7
- 20 or/8-10
- 21 or/11-18
- 22 19 and 20 and 21

PsycInfo (Ovid)
APA PsycInfo <1806 to July Week 1 2021>
2021-07-09
Results: 145

- 1 drinking behavior/
- 2 exp alcohol drinking patterns/
- 3 exp alcoholic beverages/
- 4 (wine\* or beer\* or lager\* or spirits or whiskey or whisky).mp.
- 5 alcohol intoxication/
- 6 (alcohol or binge drinking or alcoholic beverage\* or alcoholic drink\*).mp.
- 7 (drunk or drunks or drunken\* or intoxicat\* or inebriat\*).mp.
- 8 (drink\* and (social or alone or house\* or home\* or garden\* or park\* or terrace\* or pub or pubs or bar or bars or shebeen\* or tavern\* or cafe\* or restaurant\* or hotel\* or hospitality or venue\* or gig or gigs or concert or concerts or club or clubs or nightclub\* or saloon\* or bistro\* or lounge\* or domestic or waiting room\* or campus\* or student hall\* or "hall\* of residence" or residence hall\* or student union\* or party or parties or celebrat\* or gathering\* or outside or inside or road\* or street\* or festiv\* or football or sport\* or event or events or funeral\* or wake\* or wedding\* or stag night\* or hen night\* or barbeque\* or friend\* or picnic\* or socializ\* or socialis\* or lifestyle)).mp.
- 9 coronavirus/
- 10 (Wuhan seafood market pneumonia virus).mp.
- 11 (2019nCoV or Betacoronavirus\* or Corona Virus\* or Coronavirus\* or Coronovirus\* or CoV or CoV2 or COVID or COVID19\* or COVID-19\* or COVID-2019\* or HCoV-19 or nCoV or

SARS2 or SARSCoV or SARS-CoV or 2019-nCoV-19 or SARS-CoV-2 or SARS CoV 2 or SARS-CoV-2019).mp.

- 12 exp Public Health/
- 13 personal protective equipment/
- 14 preventive health behavior/ or prevention/ or quarantine/
- 15 disease transmission/
- 16 (shielding or face shield\* or face covering\* or n95 respirator\* or (mask\* adj2 wear\*)).mp.
- 17 ((covid adj 3 complian\*) or (restrict\* or mitigation\* or measures) or (hand adj3 (washing or wash or sanitiz\* or sanitis\*)) or hygien\* or distanc\* or lateral flow or NPI\* or non pharmaceutical intervention\* or nonpharmaceutical intervention\* or nonpharmacological intervention\*).mp.
- 18 ((contact adj3 tracing) or (track adj2 trace) or check in or check out).mp.
- 19 ((infect\* or disease\*) adj2 (prevent\* or control\*)).mp.
- 20 (stay-at-home or lockdown\* or quarantin\* or confinement\* or isolat\*).mp.
- 21 ventilation.mp.
- 22 or/1-8
- 23 9 or 10 or 11
- 24 or/12-21
- 25 22 and 23 and 24

Public Health (PROQUEST) 2021-07-09

Results: 1349

#### **Proquest Public Health Database**

(MESH("Alcohol Drinking" or "Alcoholic Beverages" or "Alcoholic Intoxication" or "Binge Drinking") or TIAB(wine\* or beer\* or lager\* or spirits or whisky or whiskey) or TIAB(drunk or drunks\* or drunken\* or intoxicat\* or inebriat\*) or TIAB(alcohol or "binge drinking" or "alcoholic beverage\*" or "alcoholic drink\*") or (drink\* and TIAB(social\* or alone or house\* or home\* or garden\* or park\* or terrace\* or pub or pubs or bar or bars or shebeen\* or tavern\* or cafe\* or restaurant\* or hotel\* or hospitality or venue\* or gig or gigs or concert or concerts or club or clubs or nightclub\* or saloon\* or bistro\* or lounge\* or domestic or "waiting room\*" or campus\* or "student hall" or "student halls" or "hall of residence" or "halls of residence" or "residence hall" or "residence halls" or "student union\*" or party or parties or celebrat\* or gathering\* or outside or inside or road\* or street\* or festiv\* or football or sport\* or event or events or funeral\* or wake\* or wedding\* or "stag night\*" or "hen night\*" or barbeque\* or friend\* or picnic\* or socializ\* or socialis\* or lifestyle))) AND (MESH("Coronavirus Infections" or "Coronavirus" or "Betacoronavirus" or "Covid-19" or "SARS-COV2") or ("Wuhan seafood market pneumonia virus" or 2019nCoV or Betacoronavirus\* or "Corona Virus\*" or Coronavirus\* or Coronovirus\* or CoV or CoV2 or COVID or COVID19\* or COVID-19\* or COVID-2019\* or HCoV-19 or nCoV or SARS2 or SARSCOV or SARS-CoV or 2019-nCoV-19 or SARS-CoV-2 or "SARS CoV 2" or SARS-CoV-2019)) AND (TIAB(covid n/3 complian\*) or (restrict\* or mitigation\* or measures or "face covering\*" or "face shield\*" or "N95 respirator\*" or (mask\* n/2 wear\*) or (hand n/3 (washing or wash or sanitiz\* or sanitis\*)) or hygien\* or distanc\* or "lateral flow" or NPI\* or "non

pharmaceutical intervention\*" or "nonpharmaceutical intervention\*" or "non pharmacological intervention\*" or "nonpharmacological intervention\*") or TIAB((contact n/3 tracing) or (track n/2 trace) or "check in" or "check out") or ((infect\* or disease\*) n/2 (prevent\* or control\*)) or MESH("Contact Tracing" or "Quarantine" or "Communicable Disease Control") or ("stay at home" or lockdown\* or quarantin\* or isolat\* or confinement\*) or "ventilation" or MESH("Ventilation" or "Masks"))

# PubMed 2020-07-13 Results: 787

20 #7 and #10 and #19

- 19 #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18
- 18 (Ventilation[MeSH]) or ventilation[Text Word]
- 17 "stay at home"[Text Word] or lockdown\*[Text Word] or quarantin\*[Text Word] or confinement\*[Text Word] or isolat\*[Text Word] or "self isolat\*"[Text Word]
- 16 "Infection prevention" [Text word] or "infection control" [Text word] or "disease prevention" [Text word] or "disease control" [Text word]
- 15 "contact tracing" [Text Word] or "track and trace" [Text Word] or "check in" [Text Word] or "check out" [Text Word]
- 14 ((covid[Text Word] AND complian\*[Text Word]) or (restrict\*[Text Word] or mitigation\*[Text Word] or measures[Text Word]) or (hand[Text Word] AND wash[Text Word]) or handwashing[Text Word] or (hand[Text Word] AND sanitiz\*[Text Word]) or (hand[Text Word] AND sanitis\*[Text Word]) or hygien\*[Text Word] or distanc\*[Text Word] or "lateral flow"[Text Word] or NPI[Text Word] or NPIs[Text Word] or "non pharmaceutical intervention\*"[Text Word] or "nonpharmaceutical intervention\*"[Text Word]) or "nonpharmacological intervention\*"[Text Word])
- 13 shielding[Text Word] or "face shield\*"[Text Word] or "face covering\*"[Text Word]) or "n95 respirator\*"[Text Word] or (mask[Text Word] AND wear[Text Word]) or (masks[Text Word] AND wear[Text Word]) or (masks[Text Word] AND wearing[Text Word])
- 12 (("masks"[MeSH) or (n95 respirators[MeSH]))
- 11 ((("communicable disease control"[MeSH]) or ("contact tracing"[MeSH])) or ("physical distancing"[MeSH])) or ("quarantine"[MeSH])
  10 #8 or #9
- 9 "Wuhan seafood market pneumonia virus" [Text Word] or 2019nCoV [Text Word] or Betacoronavirus\* [Text Word] or "Corona Virus\*" [Text Word] or Coronavirus\* [Text Word] or CoVID [Text Word] or COVID [Text Word] or COVID [Text Word] or COVID [Text Word] or COVID-2019\* [Text Word] or HCoV-19 [Text Word] or COVID-2019 [Text Word] or SARS-CoV [Text Word] or SARS-CoV [Text Word] or SARS-CoV [Text Word] or SARS-CoV-2019 [Text Word] or SARS-CoV-2019 [Text Word]

8 ((("coronavirus"[MeSH]) or ("Betacoronavirus"[MeSH]) or ("coronavirus infections"[MeSH])) or ("covid 19"[MeSH])) or ("sars cov 2"[MeSH])
7 #1 or #2 or #3 or #4 or #5 or #6

6 drink\*[Text Word] and (social\*[Text Word] or alone[Text Word] or house\*[Text Word] or home\*[Text Word] or garden\*[Text Word] or park\*[Text Word] or terrace\*[Text Word] or pub[Text Word] or pubs[Text Word] or bar[Text Word] or bars [Text Word] or shebeen\* [Text Word] or tavern\*[Text Word] or cafe\*[Text Word] or restaurant\*[Text Word] or hotel\*[Text Word] or hospitality[Text Word] or venue\*[Text Word] or gig[Text Word] or gigs[Text Word] or concert[Text Word] or concerts[Text Word] or club[Text Word] or clubs[Text Word] or nightclub\*[Text Word] or saloon\*[Text Word] or bistro\*[Text Word] or lounge\*[Text Word] or domestic[Text Word] or "waiting room\*"[Text Word] or campus\*[Text Word] or "student hall\*"[Text Word] or "hall of residence"[Text Word] or "halls of residence"[Text Word] or "residence hall\*"[Text Word] or "student union\*"[Text Word] or party[Text Word] or parties[Text Word] or celebrat\*[Text Word] or gathering\*[Text Word] or outside[Text Word] or inside[Text Word] or road\*[Text Word] or street\*[Text Word] or festiv\*[Text Word] or football[Text Word] or sport\*[Text Word] or event[Text Word] or events[Text Word] or funeral\*[Text Word] or wake\*[Text Word] or wedding\*[Text Word] or "stag night\*"[Text Word] or "hen night\*"[Text Word] or barbeque\*[Text Word] or friend[Text Word] or picnic\*[Text Word] or socializ\*[Text Word] or socialis\*[Text Word] or lifestyle[Text Word])

5 drunk[Text Word] or drunks\*[Text Word] or drunken\*[Text Word] or intoxicat\*[Text Word] or inebriat\*[Text Word]

4 alcohol[Text Word] or "binge drinking"[Text Word] or "alcoholic beverage\*"[Text Word] or "alcoholic drink\*[Text Word]

3 ("alcoholic intoxication"[MeSH])) or ("binge drinking"[MeSH])

2 wine\*[Text Word] or beer\*[Text Word] or lager\*[Text Word] or spirits[Text Word] or whisky[Text Word] or whisky[Text Word]

1 ((("alcohol drinking"[Mesh]) or ("alcoholic beverages"[MeSH]))

# Scopus 2021-07-30 Results: 847

(TITLE-ABS-KEY ("Wuhan seafood market pneumonia

virus" OR 2019ncov OR betacoronavirus\* OR "Corona

Virus\*" OR coronavirus\* OR coronovirus\* OR cov OR cov2 OR covid OR covid19\* OR covid-19\* OR covid-2019\* OR hcov-19 OR ncov OR sars2 OR sarscov OR sars-cov OR 2019-ncov-19 OR sars-cov-2 OR "sars cov 2" OR sars-cov-2019)) AND ((TITLE-ABS-

KEY (wine\* OR beer\* OR lager\* OR spirits OR whisky OR whiskey OR alcohol OR "binge drinking" OR "alcoholic beverage\*" OR "alcoholic drink"

OR drunk OR drunks\* OR drunken\* OR intoxicat\* OR inebriat\*)) OR ((TITLE-ABS-KEY (drink\*)) AND (TITLE-ABS-

KEY (social\* OR alone OR house\* OR home\* OR garden\* OR park\* OR terrace\* OR pub OR p ubs OR bar OR bars OR shebeen\* OR tavern\* OR cafe\* OR restaurant\* OR hotel\* OR hospita lity OR venue\* OR gig OR gigs OR concert OR concerts OR club OR clubs OR nightclub\* OR sal

oon\* OR bistro\* OR lounge\* OR domestic OR "waiting room\*" OR campus\* OR "student hall\*" OR "hall\* of residence" OR "residence hall\*" OR "student union\*" OR party OR parties OR celebrat\* OR gathering\* OR outside OR inside OR road\* OR street\* OR festiv\* OR football OR sport\* OR event OR events OR funeral\* OR wake\* OR wed ding\* OR "stag night\*" OR "hen night\*" OR barbeque\* OR friend\* OR picnic\* OR socializ\* OR socialis\* OR lifestyle)))) AND ((TITLE-ABS-KEY (covid W/3 complian\*)) OR (TITLE-ABS-KEY (shielding OR face shield\*" OR "face covering\*" OR "N95 respirator\*" OR restrict\* OR mitigation\* OR measures OR hygien\* OR distanc\* OR "lateral flow" OR npi\* OR "non pharmaceutical intervention\*" OR "nonpharmaceutical intervention\*" OR "non pharmacological intervention\*" OR "nonpharmacological intervention\*" OR "stay-athome" OR lockdown\* OR quarantin\* OR confinement\* OR isolat\* OR "check in" OR "check out" OR ventilation)) OR (TITLE-ABS-KEY (mask\* W/2 wear\*)) OR (TITLE-ABS-KEY (hand W/3 (washing OR wash OR sanitiz\* OR sanitis\*))) OR (TITLE-ABS-KEY ((contact W/3 tracing) OR (track W/2 trace))) OR (TITLE-ABS-KEY ((infect\* OR disease\*) W/2 (prevent\* OR control\*))))

# WHO COVID-19 literature database 2021-07-09

Results: 1282

- 1. (tw:(wine\*)) OR (tw:(beer\*)) OR (tw:(lager\*)) OR (tw:(whiskey)) OR (tw:(whisky)) OR (tw:(spirits)) OR (tw:(Alcohol)) OR (tw:("binge drinking")) OR (tw:(drunk)) OR (tw:(drunks)) OR (tw:(drunken\*)) OR (tw:(intoxicat\*)) OR (tw:(inebriat\*)) OR (tw:("Alcoholic drink")) OR (tw:("alcoholic beverages"))
- 2. ((tw:((tw:(drink\*)))) AND ((tw:(tw:(social\*)) OR (tw:(alone\*)) OR (tw:(house\*)) OR (tw:(home\*)) OR (tw:(garden\*)) OR (tw:(park\*)) OR (tw:(terrace\*)) OR (tw:(pub)) OR (tw:(pubs)) OR (tw:(bar)) OR (tw:(bars)) OR (tw:(shebeen\*)) OR (tw:(tavern\*)) OR (tw:(cafe\*)) OR (tw:(restaurant\*)) OR (tw:(hotel\*)) OR (tw:(hospitality)) OR (tw:(venue\*)) OR (tw:(gig)) OR (tw:(gigs)) OR (tw:(concert)) OR (tw:(concerts)) OR (tw:(club)) OR (tw:(clubs)) OR (tw:(nightclub\*)) OR (tw:(saloon\*)) OR (tw:(bistro\*)) OR (tw:(lounge\*)) OR (tw:(domestic)) OR (tw:("waiting room")) OR (tw:("waiting rooms")) OR (tw:(campus\*)) OR (tw:("student hall")) OR (tw:("student halls")) OR (tw:("hall of residence")) OR (tw:("halls of residence")) OR (tw:("residence hall")) OR (tw:("residence halls")) OR (tw:("student union")) OR (tw:("student unions")) OR (tw:(party)) OR (tw:(parties)) OR (tw:(celebrat\*)) OR (tw:(gathering\*)) OR (tw:(outside)) OR (tw:(inside)) OR (tw:(road\*)) OR (tw:(street\*)) OR (tw:(festiv\*)) OR (tw:(football)) OR (tw:(sport\*)) OR (tw:(event)) OR (tw:(events)) OR (tw:(funeral\*)) OR (tw:(wake\*)) OR (tw:(wedding\*)) OR (tw:("hen night")) OR (tw:("hen nights")) OR (tw:("stag night") OR (tw:("stag nights"))

OR (tw:(barbeque\*)) OR (tw:(friend\*)) OR (tw:(picnic\*)) OR (tw:(socializ\*)) OR (tw:(socialis\*)) OR (tw:(lifestyle)))))

3. (tw:(shielding)) OR (tw:("face shield")) OR (tw:("face shields") OR (tw:("face covering")) OR (tw:("face coverings")) OR (tw:("face-covering")) OR (tw:("facecoverings")) OR (tw:("face mask")) OR (tw:("face masks")) OR (tw:("face-mask")) OR (tw:("face-masks")) OR (tw:("N95 respirator")) OR (tw:("N95 respirators"))) OR (tw:(restrict\*)) OR (tw:(measures)) OR (tw:(mitigation\*)) OR (tw:(handwashing)) OR (tw:("hand-washing")) OR (tw:("hand washing")) OR (tw:(handsanit\*)) OR (tw:(hand sanitiser)) OR (tw:("hand sanitizer")) OR (tw:(hygien\*)) OR (tw:(distanc\*)) OR (tw:(npi\*)) OR (tw:("non-pharmaceutical intervention")) OR (tw:("non-pharmaceutical interventions")) OR (tw:("nonpharmaceutical intervention")) OR (tw:("nonpharmaceutical interventions")) OR (tw:("non pharmaceutical intervention")) OR (tw:("non pharmaceutical interventions")) OR (tw:("non-pharmacological intervention")) OR (tw:("non-pharmacological interventions")) OR (tw:("nonpharmacological intervention")) OR (tw:("nonpharmacological interventions")) OR (tw:("non pharmacological intervention")) OR (tw:("non pharmacological interventions")) OR (tw:("contact tracing") OR (tw:("track and trace")) OR (tw:("check-in")) OR (tw:("check in")) OR (tw:("check out")) OR (tw:("check-out")) OR (tw:(stay-athome)) OR (tw:(lockdown\*)) OR (tw:(quarantin\*)) OR (tw:(confinement)) OR (tw:(isolat\*)) OR (tw:("self-isolating")) OR (tw:(selfisolating)) OR (tw:(ventilation)) 4. 1 OR

# PreVIEW:COVID-19 results and website reviews

5. 3 and 4

Databas e / Website / Source	Search terms / Keywords (include date of search)	Number of relevant results	References & Links
preVIEW : COVID- 19	(title) COVID-19 AND (title/abstract) ALCOHOL (26/07/2021)	8	□ Global COVID-19 spread: socioeconomic determinants and lessons for future pandemics Authors: Nicholas Ngepah 10.21203/rs.3.rs-31764/v1
			□ Knowledge, beliefs, mental health, substance use, and behaviors related to the COVID-19 pandemic among U.S. adults: A national online survey Authors: Ralph J. DiClemente, Ariadna Capasso, Shahmir H. Ali, Abbey M. Jones, Joshua Foreman, Yesim Tozan

□Factors associated with drinking behaviour during COVID-19 social distancing and lockdown among adults in the UK Authors: Claire Garnett, Sarah E Jackson, Melissa Oldham, Jamie Brown, Andrew Steptoe, Daisy Fancourt 10.1101/2020.09.22.20199430

□ COVID-19 among bartenders and waiters before and after pub lockdown Authors: Fredrik Methi, Kjetil Telle, Karin Magnusson 10.1101/2021.02.01.21250905

Alcoholism as a Risk Factor for COVID-19: Boosting Inflammatory Response Authors: Muhammad Akram, Mehwish Iqbal, Marcos Altable, Juan Moises de la Serna 10.20944/preprints202103.0547.v1

Higher Alcohol Consumption Is Not Linked To Higher SARS CoVid19 Infection and Death Authors: Yugal Kishore Mohanta, Abeer Hashe m, Elsayed Fathi Abd\_Allah, Tapan Kumar Mo hanta 10.21203/rs.3.rs-30073/v1

Host genetic liability for severe COVID-19 overlaps with alcohol drinking behavior and diabetic outcomes and in over 1 million participants

Authors: Frank R Wendt, Antonella De Lillo, Gita A Pathak, Flavio De Angelis, - COVID-19 Host Genetics Initiative, Renato Polimanti 10.1101/2020.11.08.20227884

□ A global survey on changes in the supply, price and use of illicit drugs and alcohol, and related complications during the 2020 COVID-19 pandemic

Authors: Ali Farhoudian, Seyed Ramin Radfar, Hossein Mohaddes Ardabili, Parnian Rafei, Mohsen Ebrahimy, Arash Khojasteh Zonoozi, Cornelis A J De Jong, Mehrnoosh Vahidi, Masud Yunesian, Christos Kouimtsidis, Shalini Arunogiri, Helena Hansen, Kathleen T Brady, Marc N Potenza, - ISAM-PPIG Global Survey Consortium, Alexander Mario Baldacchino, Hamed Ekhtiari 10.1101/2020.07.16.20155341

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World Health Organisa tion Europe www.eu ro.who.i nt	COVID-19 alcohol	1
Centers f or Disease Control www.cd c.gov	COVID-19 alcohol	1

Brief report on key information relating to alcohol consumption and COVID-19, including comment that "alcohol alters your thoughts, judgement, decision-making and behaviour". ,https://www.euro.who.int/\_\_dat a/assets/pdf\_file/0010/437608/Alcohol-and-COVID-19-what-you-need-to-know.pdf FAQ document outlining key questions raised in relation to alcohol and COVID-19; however, no specific mention of impact of alcohol consumption on NPI adherence. https://www.euro.who.int/en/healthtopics/disease-prevention/alcoholuse/publications/2020/fact-sheet-alcoholand-covid-19-what-you-need-to-know-2020/frequently-asked-questions-faq-aboutalcohol-and-covid-19 Link to WHO document above entitled "What

you need to know".