

References

Aktuell

FÖGEN 2020

Zacharias Fögen, *Facemasks and SARS-CoV-2 case fatality rate*. [unknown \(2020\), preprint, 1–14](#).

The importance of facemasks during COVID-19 pandemic has been a controversial topic, hampered in part by lack of empirical evidence. However, a large number of countries worldwide has already issued mask mandates. Here I show, that mask mandates in Kansas counties during the summer of 2020 actually increased case fatality rate significantly compared to Kansas counties without mask mandates, with a risk ratio of over 1.5 for death with and by SARS-CoV-2. After correcting for death with SARS-CoV-2, I find that the case fatality rate by SARS-CoV-2 is as low as 0.026 % in Kansas counties without mask mandates, but 0.286 % in Kansas counties with mask mandates, resulting in a highly significant risk ratio of over 11. Also, I find that face masks to not reduce but slightly increase infection rates.

Why this happens and the possible connection between long-term effects associated with SARSCoV2 and facemasks are explained in theory herein by the ‘foegen effect’, which describes the deep reinhalation of pure virions that were caught in the face masks as droplets. These findings have immediate implications for the handling of SARS-CoV-2 worldwide.

JONES 2020

Nicola Jones, *How Covid-19 is Changing the Cold and Flu Season*. [nature 588 \(2020\), 388–390](#).

Measures meant to tame the coronavirus pandemic are quashing influenza and most other respiratory diseases, which could have wide-ranging implications.

POLACK 2020

Fernando P. Polack et al., *Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine*. [New England Journal of Medicine \(2020\), preprint, 1–13. DOI:10.1056/NEJMoa2034577](#).

[NEJMed2020.12-Polack-Supplement1.pdf](#), [NEJMed2020.12-Polack-Supplement2.pdf](#), [NEJMed2020.12-Polack-Supplement3.pdf](#)

Background: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection and the resulting coronavirus disease 2019 (Covid-19) have afflicted tens of millions of people in a worldwide pandemic. Safe and effective vaccines are needed urgently.

Methods: In an ongoing multinational, placebo-controlled, observer-blinded, pivotal efficacy trial, we randomly assigned persons 16 years of age or older in a 1:1 ratio to receive two doses, 21 days apart, of either placebo or the BNT162b2 vaccine candidate (30 µg per dose). BNT162b2 is a lipid nanoparticle–formulated, nucleoside-modified RNA vaccine that encodes a prefusion stabilized, membrane-anchored SARS-CoV-2 fulllength spike protein. The primary end points were efficacy of the vaccine against laboratory-confirmed Covid-19 and safety.

Results: A total of 43,548 participants underwent randomization, of whom 43,448 received injections: 21,720 with BNT162b2 and 21,728 with placebo. There

were 8 cases of Covid-19 with onset at least 7 days after the second dose among participants assigned to receive BNT162b2 and 162 cases among those assigned to placebo; BNT162b2 was 95 % effective in preventing Covid-19 (95 % credible interval, 90.3 to 97.6). Similar vaccine efficacy (generally 90 to 100 %) was observed across subgroups defined by age, sex, race, ethnicity, baseline body-mass index, and the presence of coexisting conditions. Among 10 cases of severe Covid-19 with onset after the first dose, 9 occurred in placebo recipients and 1 in a BNT162b2 recipient. The safety profile of BNT162b2 was characterized by short-term, mild-to-moderate pain at the injection site, fatigue, and headache. The incidence of serious adverse events was low and was similar in the vaccine and placebo groups.

Conclusions: A two-dose regimen of BNT162b2 conferred 95 % protection against Covid-19 in persons 16 years of age or older. Safety over a median of 2 months was similar to that of other viral vaccines. (Funded by BioNTech and Pfizer; ClinicalTrials.gov number, NCT04368728.)

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TUPPER 2020

Paul Tupper, Himani Boury, Madi Yerlanov & Caroline Colijn, *Event-specific interventions to minimize COVID-19 transmission*. [PNAS 117 \(2020\), 32038–32045](#). DOI:10.1073/pnas.2019324117.

[pnas117-32038-Supplement.pdf](#)

COVID-19 is a global pandemic with over 25 million cases worldwide. Currently, treatments are limited, and there is no approved vaccine. Interventions such as handwashing, masks, social distancing, and “social bubbles” are used to limit community transmission, but it is challenging to choose the best interventions for a given activity. Here, we provide a quantitative framework to determine which interventions are likely to have the most impact in which settings. We introduce the concept of “event R,” the expected number of new infections due to the presence of a single infectious individual at an event. We obtain a fundamental relationship between event R and four parameters: transmission intensity, duration of exposure, the proximity of individuals, and the degree of mixing. We use reports of small outbreaks to establish event R and transmission intensity in a range of settings. We identify principles that guide whether physical distancing, masks and other barriers to transmission, or social bubbles will be most effective. We outline how this information can be obtained and used to reopen economies with principled measures to reduce COVID-19 transmission.

Keywords: COVID-19 | disease transmission | epidemics | interventions

Significance: We provide a simple model of COVID-19 transmission at workplaces, events, and other settings. We use data from reported single-event, short-duration outbreaks to estimate the transmission rate, number of contacts, and turnover at events. We use these to predict how many new infections are expected to occur at various events given the presence of a single infectious individual. We then determine which types of interventions will be the most effective in reducing the number of infections: reducing transmission rates (such as with masks), so-

cial distancing (reducing the number of people in contact), or bubbling (keeping contact groups small and consistent).

WISE 2020

Jacqui Wise, *Covid-19: New coronavirus variant is identified in UK*. *British Medical Journal* **371** (2020), m4857. DOI:10.1136/bmj.m4857.

England's health secretary, Matt Hancock, has told parliament that a new variant of covid-19 has been identified and may be driving infections in the south east, leading to headlines about "mutant covid." Jacqui Wise answers some common questions.

Bibel

MÜLLER 2008

Reinhard Müller, *Jahwe als Wettergott, Studien zur althebräischen Kultlyrik anhand ausgewählter Psalmen*. Beihefte zur Zeitschrift für die alttestamentliche Wissenschaft 387 (Berlin 2008).

Jungpaläolithikum

ROSE 2020

Jeffrey I. Rose, *Introduction to Human Prehistory in Arabia, The Lost World of the Southern Crescent*. (unpublished 2020).

As our time here together huddled around the fire draws to a close, there remains one lingering question to be addressed and a few fundamental ideas worth exploring. How is it possible that events preceding the written word, from the time before time, still live within religious scriptures and local folklores? Concepts such as the Garden of Eden, Noah's Flood, and the Forbidden Fruit are built into the foundations of Abrahamic mythos, while the story of the Lost People of 'Ad is among the most often repeated in the Qur'an. Can stories such as these survive for up to five thousand years before the advent of writing? How durable is oral tradition? And why does it matter? What is the enduring message embedded within these most ancient myths of creation?

Kultur

PAPKE 1989

Werner Papke, *Die Sterne von Babylon, Die geheime Botschaft des Gilgamesch – nach 4000 Jahren entschlüsselt*. (Augsburg 1993).

Mittelpaläolithikum

DIBBLE 2017

Harold L. Dibble, Aylar Abodolahzadeh, Vera Aldeias, Paul Goldberg, Shannon P. McPherron & Dennis M. Sandgathe, *How Did Hominins Adapt to Ice Age Europe without Fire?* *Current Anthropology* **58** (2017), Supplement, S278–S287.

CurrAnth58-S278-Supplement.pdf

Analyses of archaeological material recovered from several Middle Paleolithic sites in southwest France have provided strong corroborating data on Neanderthal use of fire. Both direct and indirect data show that Neanderthals in this region were frequently and/or intensively using fire during warmer periods, but such evidence declines significantly in occupations that took place during colder periods. One possible explanation for this pattern is that it reflects the inability of Western European Neanderthals to make fire, simply because natural sources of fire occur much more frequently during warmer climatic periods. Regardless of the explanation, the long periods of diminished evidence of fire shows that, unlike modern humans, these hominins were not obligate fire users, and this fact in itself raises important questions of how they adapted, physiologically and/or technologically, to the generally harsh glacial conditions of the middle latitude of Europe and to reduced energy returns typical of raw food. As a corollary, it also raises questions regarding their need for and use of fire during the warmer periods.

DIBBLE 2018

Harold L. Dibble, Dennis Sandgathe, Paul Goldberg, Shannon McPherron & Vera Aldeias, *Were Western European Neandertals Able to Make Fire?* [Journal of Paleolithic Archaeology](#) **1** (2018), 54–79.

Significant variability has been observed in the frequency of fire use over the course of the Late Pleistocene at several Middle Paleolithic sites in southwest France. In particular, Neandertals appear to have used fire more frequently during warm climatic periods and very infrequently during cold periods. After reviewing several lines of evidence and alternative explanations for this variability, the null hypothesis that these Neandertals were not able to make fire still stands.

Keywords: Pyrotechnology. Paleolithic fire | Middle Paleolithic . Western European Neandertals

HENRY 2017

Amanda G. Henry, *Neanderthal Cooking and the Costs of Fire.* [Current Anthropology](#) **58** (2017), Supplement, S329–S336.

While it is clear that Neanderthals used fire for cooking their foods in some times and places, the record of their use of fire is somewhat patchy. We should not assume that Neanderthals had the same relationship with fire that we do; as a technological/cultural behavior, fire may be better understood as a tool that was used only when the costs of manufacture and maintenance were outweighed by the benefits.

Religion

CZACHESZ 2018

István Czachesz, *Ritual and Transmission.* In: RISTO URO, JULIETTE J. DAY, RICHARD E. DEMARIS & RIKARD ROITTO (Hrsg.), *The Oxford Handbook of Early Christian Ritual.* (Oxford 2018), 115–133.

In conclusion, our analysis of the connection between ritual and transmission has addressed multiple systems and mechanisms that were largely unknown or understudied before the arrival of cognitive approaches. First, we have seen how rituals engage declarative memory, modulating the formation of new memories with the help of different degrees of emotional arousal, sense of ownership, and

stress. We identified ritual practices in early Christianity that manipulated declarative memories with the help of one or more of these factors. Second, we suggested that transmission in rituals occurs in channels outside of declarative memory, including procedural memory, artefacts, and epigenetic programming. We discussed how artefact culture, power relationships, and religious dietary rules could interact with ritual practice. Third, we recommended reframing the problem of religious transmission against the model of inheritance systems, aligning the dimensions of the investigation with broader issues of human genetic and cultural evolution.

CZACHESZ 2018

István Czachesz, *Magic*. In: RISTO URO, JULIETTE J. DAY, RICHARD E. DEMARIS & RIKARD ROITTO (Hrsg.), *The Oxford Handbook of Early Christian Ritual*. (Oxford 2018), 187–203.

This chapter dealt with the academic use of the term magic, suggesting that in spite of the troubled history of the concept in both ancient and modern usage, it remains a helpful category for studying religion and related cultural forms. We focused on cognitive mechanisms that underlie the theory and practice of magic cross-culturally. Magic is based on the elementary learning mechanism of superstitious conditioning, gains support from implicit and explicit (cross-cultural as well as culture-specific) cognitive processes, and interacts with miracle traditions. The last component was especially strong in earliest Christianity, where stories about the miracles of Jesus and the apostles were accompanied by evidence of and encouragement to perform miracles by both experts and ordinary members of the movement.