

# Evidence Search Service

## Results of your search request

### Mandatory Covid vaccines for NHS staff 2

**ID of request:** 32906

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Please acknowledge this work in any resulting paper or presentation as: Evidence search: Mandatory Covid vaccines for NHS staff 2. June White. ( 2nd December, 2021). BASINGSTOKE, UK: Hampshire Healthcare Library Service.

#### Sources searched

BMC Public Health (1)

Cardiff University (1)

Department of Health and Social Care (DHSC) (1)

EMBASE (8)

MEDLINE (2)

Nursing Times (1)

Secondary Legislation Scrutiny Committee (1)

The Conversation.com (2)

University of Liverpool (1)

**Date range used** (5 years, 10 years): 2021-2021

**Limits used** (gender, article/study type, etc.): English

**Search terms and notes** (full search strategy for database searches below):

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## **A. Institutional Publications**

*Cardiff University*

**Scientists may have solved an important part of the mystery of ultra-rare blood clots linked to adenovirus COVID-19 vaccines (2021)**

[Available online at this link](#)

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Scientists from Cardiff University and Arizona State University worked with AstraZeneca to investigate vaccine-induced immune thrombotic thrombocytopenia (VITT), also known as thrombosis with thrombocytopenia syndrome (TTS), a life-threatening condition seen in a very small number of people after receiving the Oxford-AstraZeneca or Johnson & Johnson vaccines. The global team used state-of-the-art technology to analyse the AstraZeneca vaccine in minute detail to understand whether the ultra-rare side effect could be linked to the viral vector. Their findings suggest it is the viral vector – in this case an adenovirus used to shuttle the coronavirus'

genetic material into cells – and the way it binds to platelet factor 4 (PF4) once injected that could be the potential mechanism. In very rare cases, the scientists suggest, the viral vector may enter the bloodstream and bind to PF4, where the immune system then views this complex as foreign. They believe this misplaced immunity could result in the release of antibodies against PF4, which bind to and activate platelets, causing them to cluster together and triggering blood clots in a very small number of people after the vaccine is administered.

## *Department of Health and Social Care (DHSC)*

### **Making vaccination a condition of deployment in health and wider social care sector (2021)**

[Available online at this link](#)

The results of the consultation of making vaccines mandatory for NHS staff. The aim of this consultation was to seek views on whether or not the government should extend the existing statutory requirement, for those responsible for care homes to ensure that they have evidence that those working or volunteering in a care home have been vaccinated against COVID-19, to other health and care settings, as a condition of deployment. The consultation asked for views on whether people supported the proposed legislative change, the scope of the policy, proposed exemptions, implementation methods; and sought views on equality impacts and impact on maintaining safe levels of staffing and the workforce. DHSC undertook thorough analysis of the more than 34,900 consultation responses and considered the feedback received. Overall, the consultation showed that, while a majority of respondents (65%) did not support the proposal, the responses from the health and social care sector were mixed, with some groups (for example managers of healthcare or social care services) mostly supporting the proposed legislative change while others (for example service users and relatives of service users) were mostly opposed

## *House of Lords*

### **Draft Health and Social Care Act 2008 (Regulated Activities) (Amendment) (Coronavirus) (No. 2) Regulations 2021 (2021)**

[Available online at this link](#)

This instrument extends the requirement for mandatory COVID-19 vaccination to anyone working in the NHS on a regulated activity in the health and social care sector who will have direct, face to face contact with a service user. In our 10th Report on the preceding Care Homes Regulations, we said that if the Department of Health and Social Care (DHSC) decided to extend its mandatory vaccination policy, we would expect to see a more effectively argued case for it: unfortunately, the Explanatory Memorandum (EM) accompanying this instrument is just as superficial. DHSC has published other documents in relation to this instrument but useful information is scattered between them and much of it, particularly the “Impact Statement”, is very broad brush. The Statement is no substitute for the required Impact Assessment (IA), which should have been integral to the policy development process. An IA should include both detailed consideration of the costs and benefits of the policy chosen and allow it to be compared with rejected alternative solutions. Our many concerns include: • The legislation lacks practical detail about how key expressions, such as “ face to face “ or “otherwise engaged”, are to be applied, instead referring to future guidance “to supplement this instrument”; • The EM makes no reference to any lessons learned from the roll-out of the Care Homes Regulations and is also silent on what contingency plans DHSC is making to cope with expected staff losses when these Regulations take effect, which are likely to be particularly acute in London. • While we appreciate that implementing an exemption on religious grounds might be difficult, DHSC provides no evidence to support its assertions that doing so would “significantly reduce the impact of the policy” or cause tension among co-workers.

*Nursing Times*

**Case for mandatory Covid-19 jabs for NHS staff ‘not strong enough’ (2021)**

[Available online at this link](#)

An article reporting the House of Lord's report about the requirement for mandatory vaccination for NHS staff. (see item Draft Health and Social Care Act 2008 (Regulated Activities) (Amendment) (Coronavirus) (No. 2) Regulations 2021) The government's case for implementing mandatory Covid-19 vaccinations for NHS staff in England has failed to address how the health service will cope when thousands of staff leave their jobs as a result, a report has warned. A new report, published today by the House of Lords Secondary Legislation Scrutiny Committee, has ruled that the government's evidence for the move was "broad-brush" and "superficial". "The house may expect to be provided with some very strong evidence to support this policy choice, and DHSC has signally failed to do so" It added that the potential benefits of the proposal seemed "disproportionately small", given the subsequent costs for recruitment and the disruption it would have on the health service

*The Conversation.com*

**How cognitive biases and adverse events influence vaccine decisions (maybe even your own) (2021)**

[Available online at this link](#)

A 'plain english' analysis of why some people may be vaccine hesitant. It examines both concerns about vaccine adverse events and the role of cognitive biases on vaccine hesitancy. The article can be heard as a podcast. The study that the article refers to is listed separately in this document (see Vaccine hesitancy: evidence from an adverse events following immunization database, and the role of cognitive biases)

**How to dissuade parents from believing in anti-vaxxer conspiracy theories (2021)**

[Available online at this link](#)

We know that anti-vaccine conspiracy beliefs can be a barrier to vaccine uptake. A 2014 study showed that British parents exposed to anti-vaccine conspiracy theories, when asked to imagine that they had a fictional eight-month-old, were less likely to get that child vaccinated. Also, a more recent study across 24 countries demonstrated that anti-vaccine attitudes were highest among those who were also high in conspiratorial thinking. Once COVID vaccines started being developed, it didn't take long for specific conspiracy theories about them to appear – for instance that they contain microchips or make people infertile. Research has shown that believing in such theories is associated with reduced intentions to receive a COVID vaccine. It's therefore highly plausible that believing in COVID conspiracies could prevent parents from wanting to vaccinate their children against the coronavirus. Our research has looked at how to dissuade parents from believing in conspiracy theories that might prevent them from vaccinating their children – which is particularly relevant now that COVID vaccines are being offered to under-16s in many countries.

*University of Liverpool*

## **£1.6m study aims to understand why COVID-19 vaccines can lead to rare instances of blood clotting with low platelets (2021)**

[Available online at this link](#)

A new programme of work led by the University of Liverpool is seeking to understand the very rare, but very serious, condition of blood clotting with low platelets in the general population, in COVID-19 infection, and potentially following vaccination. The vast majority of people who experience a side effect from COVID-19 vaccination have only mild reactions lasting for two or three days. However, in March 2021 reports of small numbers of people being admitted to hospital predominantly after the AZ vaccine with what could potentially be a very rare side effect of vaccination began to emerge. These people had blood clots in the major veins in the brain, abdomen, or elsewhere in the body, but at the same time a low level of platelets – which are responsible for clotting – in the blood. The researchers, from eleven different institutions, supported by a wide range of collaborators within the NHS and national agencies, will work together to study the mechanisms underlying the occurrence of blood clots with low platelets – known as thrombotic thrombocytopenia syndrome (TTS). This project is supported by the National Institute for Health Research and backed by £1.6 million of government funding from the Vaccine Taskforce.

## **B. Original Research**

1. **Adverse reactions following COVID-19 vaccination: An Ecuadorian experience**  
Vanegas E. *Annals of Medicine and Surgery* 2021;72:No page numbers.

Background: Limited large-scale studies have been conducted to investigate the adverse effects of COVID-19 vaccine in Latin America, particularly among the healthcare worker (HCW) population in Ecuador. The objective of this study was to assess a cohort of Ecuadorian healthcare workers for adverse reactions following vaccination with the Pfizer-BioNTech vaccine. <br/>Method(s): We conducted an observational cross-sectional study to assess the potential adverse reactions to the Pfizer-BioNTech COVID-19 vaccine among a sample of healthcare workers (HCWs) in the city of Guayaquil, Ecuador, from March to May 2021. <br/>Result(s): The sample comprised 1291 patients, with a mean age of 39.3 years (SD, 13.5). In general, 79% (N = 1020) of participants presented an adverse effect of any type at first dose, while 75.1% (N = 969) did so at the second dose. Pain at the puncture site was the most common adverse effect overall after either the first (68.4%) and second (55.6%) dose. Regarding anaphylaxis, no participant developed the condition after the first dose, and only 0.2% (N = 2) developing it at the second dose. No fatalities were reported. <br/>Conclusion(s): Our findings suggest that adverse reactions following COVID-19 vaccination with the Pfizer-BioNTech vaccine are relatively common, albeit often mild and self-limited. Consistent with the literature there were few cases of anaphylaxis, and no deaths that could be attributed to the inoculation with the vaccine. We hope our findings can help to reassure the public that benefits of vaccination highly outweigh the risks and contribute to the effort of reducing vaccine hesitancy among those who are concerned about the safety and potential side effects.<br/>Copyright &#xa9; 2021

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2. **Comparing the attitude toward the COVID-19 and the 2020/21 and 2019/20 flu vaccination campaigns among Italian healthcare workers**  
Collatuzzo G. *Vaccines* 2021;9(11):No page numbers.

Background: While the uptake of the COVID-19 vaccine among healthcare workers (HCWs) is suboptimal, vaccine hesitancy has not been characterized in detail in this population. <br/>Objective(s): The aim of this study was to compare the prevalence of health-related conditions reported by HCWs during the COVID-19, 2020/21 flu, and

2019/20 flu vaccination campaigns, so to test the hypothesis that HCWs were more prone to report health conditions during the COVID-19 campaign. **Method(s):** We analyzed vaccination questionnaires of 176 hospital-based HCWs who underwent the COVID-19 and the 2020/21 flu vaccinations; 2019/20 flu vaccination questionnaires were available for 130 of them. Outcomes included self-reported allergies, chronic diseases, and use of medications. We tested for prevalence equality, analyzed differences using the kappa statistics and concordance correlation, and explored factors associated with differences in reporting. **Result(s):** There was no difference in the proportion of HCWs reporting allergies in the three questionnaires, while chronic diseases were more frequently reported in the COVID-19 than in both 2020/21 ( $p = 0.04$ ) and 2019/20 flu questionnaires ( $p = 0.02$ ). Furthermore, a higher proportion of HCWs reported medications use in the COVID-19 vaccination questionnaire, compared to both the 2020/21 and the 2019/20 flu vaccination questionnaires ( $p < 0.001$  for both). In each vaccine campaign, women reported more conditions than men, and the difference between chronic disease reports was greater for women than for men. **Conclusion(s):** Our results show more frequent reporting of health conditions during the COVID-19 than the flu vaccination campaigns, providing quantitative evidence of hesitancy of HCWs towards the COVID-19 vaccine. Copyright © 2021 by the authors. Licensee MDPI, Basel, Switzerland.

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### 3. **Covid-19 vaccination should be mandatory for healthcare workers.**

Sokol Daniel BMJ (Clinical research ed.) 2021;375:n2670.

The author of this article is a medical ethicist and barrister. He asks 'who is right' in the debate about mandatory covid vaccinations. The Royal College of Physicians and the Royal Pharmaceutical Society have spoken out against mandatory covid vaccinations for healthcare staff. The Royal College of Nursing has "significant concerns" about it. On 14 October 2021, the Nuffield Council on Bioethics called for more evidence of the need for mandatory vaccination before resorting to coercion.<sup>1</sup> In contrast, countries such as France, Greece, Italy, and Hungary have already made covid vaccination mandatory for healthcare workers and last week the UK's secretary of state for health and social care, Sajid Javid, said that he was "leaning towards" compulsory vaccination. So who is right?

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### 4. **Covid-19 vaccine hesitancy in a city with free choice and sufficient doses**

Wong M.C.S. Vaccines 2021;9(11):No page numbers.

**Background:** Vaccine hesitancy represents one of the major global health issues around the world. We examined the perception, attitude, perceived barriers and facilitation measures of receiving the COVID-19 vaccine in a Chinese population with free vaccine choices (Sinovac [Coronavac] vs. BioNTech/Fosun [Comirnaty]) and adequate doses. **Method(s):** We conducted a random telephone survey of the general population in 1195 subjects aged 18 years or above from 23 April 2021 to 8 May 2021 after two months of vaccine rollout. A descriptive analysis of the levels of enabling factors, obstacles and perception of COVID-19 vaccination was conducted using ANOVA and Chi-square tests for trend. **Result(s):** Only 10.1% and 13.5% had received one and two COVID-19 vaccine doses, respectively. Among those who had not received any COVID-19 vaccine (75.4%), only 25.1% expressed their intention to receive in the coming 6 months. The barriers with the highest scores included "having heard of cases with serious adverse events or death after vaccination" (score: 8.17 out 10, 95% C.I. 7.99, 8.35), "lack of confidence on

governmental recommendations" (7.69, 95% C.I. 7.47, 7.91), and "waiting for a better vaccine" (7.29, 95% C.I. 7.07, 7.52). The highest score for the impact of various incentives for vaccination was for "vaccine passports for overseas travel" (4.44, 95% C.I. 4.18, 4.71).  
Conclusion(s): Vaccine hesitancy is commonly observed in this Chinese population despite adequate provision of vaccine doses and choices. No single incentive is strong enough to promote vaccination, and multiple facilitation measures for different groups of population are needed to encourage vaccine uptake. Active clarification and promotion by medical professionals together with a variety of incentives are needed to drive vaccine uptake.  
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5. **Covid-19 vaccine hesitancy in healthcare personnel: A university hospital experience**  
Kara Esen B. Vaccines 2021;9(11):No page numbers.

Healthcare workers are among risk groups in the COVID-19. Even if they are not infected with the disease, they witness the effects of the pandemic. The aim of the study is to determine the factors affecting COVID-19 vaccination status and reasons for vaccine hesitancy of healthcare personnel in our hospital. Firstly, the vaccination status and demographic characteristics of all healthcare personnel was evaluated. After that, a survey was applied to 408 vaccinated and 297 nonvaccinated personnel. Within the first month after the beginning of vaccination, 66% of 3937 healthcare personnel received a COVID-19 vaccine. The number of vaccinated personnel was higher among doctors, master graduates or higher educational levels and basic science-laboratory unit workers. In the surveyed group, being under the age of 50 (OR:1.85), being nondoctor healthcare personnel (nurse/midwife OR:1.78, administrative personnel OR:3.42, patient attendant/cleaning staff OR:4.11, security guard/other OR:2.96), having had the disease before (OR:2.36), not having the flu vaccine (OR:3.24) and hesitancy about other vaccines (OR:6.61) were found to be independent risk factors for not having a COVID-19 vaccine or having it late. The three most common reasons for not getting vaccinated were doubt on the efficacy of the vaccine, distrust of its content, and fear of side effects. Taking steps by considering the main factors of hesitancy among healthcare personnel will increase the vaccine acceptance.  
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6. **COVID-19 vaccine mandate for healthcare workers in the United States: a social justice policy**  
Hagan K. Expert Review of Vaccines 2021;:No page numbers.

Introduction: Vaccination is the most effective strategy to mitigating COVID-19 and restoring societal function. As the pandemic evolves with no certainty of a herd immunity threshold, universal vaccination of at-risk populations is desirable. However, vaccine hesitancy threatens the return to normalcy, and healthcare workers (HCWs) must embrace their ambassadorial role of shoring up vaccine confidence. Unfortunately, voluntary vaccination has been suboptimal among HCWs in the United States, a priority group for whom immunization is essential for maintaining health system capacity and the safety of high-risk patients in their care. Consequently, some health systems have implemented mandates to improve compliance. Areas covered: This article discusses the ethical and practical considerations of mandatory COVID-19 vaccination policies for HCWs utilizing some components of the World Health Organization's framework and the unique context of a pandemic with evolving infection dynamics. Expert opinion: COVID-19 vaccine mandates for universal immunization of HCWs raise ethical and practical debates about their

appropriateness, especially when the vaccines are pending full approval in most jurisdictions. Given the superiority of the vaccines to safety and testing protocols and their favorable safety profile, we encourage health systems to adopt vaccination mandates through participatory processes that address the concerns of stakeholders. Copyright © 2021 Informa UK Limited, trading as Taylor & Francis Group.

#### 7. **Ethical Issues in Mandating COVID-19 Vaccination for Health Care Personnel**

Olick R.S. Mayo Clinic Proceedings 2021;96(12):2958-2962.

Here we discuss whether vaccine mandates for HCP should be adopted. After defining the ethical values that frame this debate, we present the argument for compulsory vaccination that prioritizes the duty to protect and to promote the greater good of patients, staff, and communities and the opposing view that prioritizes individual rights of autonomy and informed consent to opt out of medical interventions. This analysis should also be instructive for future policy regarding recommended booster shots and whether a regular vaccination series should become necessary with spread of the Delta or other novel variants, similar to seasonal influenza.

#### 8. **Shared decision-making interventions: An overview and a meta-analysis of their impact on vaccine uptake**

Scalia P. Journal of Internal Medicine 2021;:No page numbers.

Background: The interest in shared decision making (SDM) and the use of patient decision aids have increased significantly. Research indicates that this approach has benefits and yet, implementation remains a challenge. To illustrate this development, we focus on vaccine hesitancy which has become a serious public health challenge during the COVID-19 pandemic. Various strategies have been used in healthcare, with limited success, to help patients overcome vaccine hesitancy. It is unclear whether SDM interventions can increase vaccination rates.   
Aim(s): Our aim was 2-fold: to provide an overview of SDM and the use of patient decision aids and to determine the effect of SDM interventions on vaccine uptake.   
Method(s): To provide an overview, we drew on our knowledge of the field and summarized the most recent systematic reviews. We examined the impact on vaccine hesitancy by searching for randomized controlled trials (RCTs) of SDM interventions, conducted a meta-analysis and calculated a pooled odds ratio. Additional outcomes were reported in a narrative synthesis.   
Result(s): SDM is viewed as the pinnacle of patient-centred care, supported by an ethical imperative and by empirical evidence of benefits. We found 10 RCTs that met our inclusion criteria. SDM interventions significantly increased vaccine uptake compared to control groups (odds ratio = 1.45; 95% confidence interval [1.17,1.80]; p < 0.01). Some RCTs also reported significantly decreased decisional conflict and increased decision confidence.   
Conclusion(s): Future health care delivery systems will need to consider how to support the implementation of SDM. Interventions designed to facilitate this approach can represent a helpful, ethically defensible, strategy to increase vaccination rates. Copyright © 2021 The Association for the Publication of the Journal of Internal Medicine

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#### 9. **Some Nurses Still Resist Vaccination Against COVID-19.**

Anon. The American journal of nursing 2021;121(11):15.

Vaccine safety is their main concern.

[Available online at this link](#)

10. **Strategies associated with COVID-19 vaccine coverage among nursing home staff**  
Berry S.D. Journal of the American Geriatrics Society 2021;;No page numbers.

Background: After the first of three COVID-19 vaccination clinics in U.S. nursing homes (NHs), the median vaccination coverage of staff was 37.5%, indicating the need to identify strategies to increase staff coverage. We aimed at comparing the facility-level activities, policies, incentives, and communication methods associated with higher staff COVID-19 vaccination coverage. <br/>Method(s): Design. Case-control analysis. Setting. Nationally stratified random sample of 1338 U.S. NHs participating in the Pharmacy Partnership for Long-Term Care Program. Participants. Nursing home leadership. Measurement. During February 4-March 2, 2021, we surveyed NHs with low (<math>\leq 35\%</math>), medium (40%-60%), and high (<math>\geq 75\%</math>) staff vaccination coverage, to collect information on facility strategies used to encourage staff vaccination. Cases were respondents with medium and high vaccination coverage, whereas controls were respondents with low coverage. We used logistic regression modeling, adjusted for county and NH characteristics, to identify strategies associated with facility-level vaccination coverage. <br/>Result(s): We obtained responses from 413 of 1338 NHs (30.9%). Compared with facilities with lower staff vaccination coverage, facilities with medium or high coverage were more likely to have designated frontline staff champions (medium: adjusted odds ratio [aOR] 3.6, 95% CI 1.3-10.3; high: aOR 2.9, 95% CI 1.1-7.7) and set vaccination goals (medium: aOR 2.4, 95% CI 1.0-5.5; high: aOR 3.7, 95% CI 1.6-8.3). NHs with high vaccination coverage were more likely to have given vaccinated staff rewards such as T-shirts compared with NHs with low coverage (aOR 3.8, 95% CI 1.3-11.0). Use of multiple strategies was associated with greater likelihood of facilities having medium or high vaccination coverage: For example, facilities that used <math>\geq 9</math> strategies were three times more likely to have high staff vaccination coverage than facilities using <math>\leq 6</math> strategies (aOR 3.3, 95% CI 1.2-8.9). <br/>Conclusion(s): Use of designated champions, setting targets, and use of non-monetary awards were associated with high NH staff COVID-19 vaccination coverage.<br/>Copyright &#xa9; 2021 The American Geriatrics Society.

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11. **Vaccine hesitancy: evidence from an adverse events following immunization database, and the role of cognitive biases**  
Azarpanah et al BMC Public Health 2021;;1-13.

Vaccine hesitancy has been a growing challenge for public health in recent decades. Among factors contributing to vaccine hesitancy, concerns regarding vaccine safety and Adverse Events (AEs) play the leading role. Moreover, cognitive biases are critical in connecting such concerns to vaccine hesitancy behaviors, but their role has not been comprehensively studied. In this study, our first objective is to address concerns regarding vaccine AEs to increase vaccine acceptance. Our second objective is to identify the potential cognitive biases connecting vaccine hesitancy concerns to vaccine-hesitant behaviors and identify the mechanism they get triggered in the vaccine decision-making process.

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