



Public Health Dorset

Part of BCP and Dorset Councils

HEALTH PROTECTION REPORT

2022

Foreword

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Welcome to the 2022 Health Protection Annual Report – a really valuable resource that I hope captures and reflects the importance of the work we do as a team and system to reduce threats to health, and keep our residents in good health.

Many members of the public will have become aware of the importance of health protection during the COVID-19 pandemic. In 2023, the World Health Organization declared an end to the global emergency, yet work on health protection continues. You can see from the diversity of issues covered in this report how important it is for us to maintain vigilance, understand the scale of threats to health, and be ready to work with a range of partners on how we maintain an effective response.

Dorset's Health Protection Network has had to respond to a number of incidents in the past year, including monkeypox (now mpox), streptococcus infections, scabies and latent tuberculosis affecting healthcare workers. There is also a significant amount of work required by our supporting colleagues, including effective, timely and accurate communications to reduce anxiety, clarify risks, and ensure partners know how to respond.

There is also a substantial amount of important prevention work that happens – ensuring an effective and equitable immunisation function, and providing infection prevention and control advice to limit the spread of pathogens and maintain best practice.

I would like to thank the team involved, and our partners, in the work that has been done in the past year. But also for keeping health protection work at the forefront of our organisations' priorities' and thinking as we head into 2023. As we saw with the scabies outbreaks last year, there are new pressures on our local organisations in relation to supporting the Home Office to respond to the impact of asylum seekers and refugees. Ensuring we are able to work together as a team across the system to respond to these challenges will be a continuing theme of the work in 2023, as well as being prepared for new threats. I have no doubt we are in good shape to meet these challenges, and look forward to continuing to work with our local partners in delivering an effective function.



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“Health protection practice aims to prevent, assess and mitigate risks and threats to human health arising from communicable diseases and exposure to environmental hazards such as chemicals and radiation.”

What Good Looks Like for High Quality Local Health Protection Systems, Public Health England



Introduction

The effective delivery of local health protection services requires close partnership working between numerous agencies. These include local government, UK Health Security Agency (UKHSA), NHS commissioners and providers, voluntary sector organisations, and other key partners.

Local authorities have health protection responsibilities, delegated to them by the Secretary of State, which include ensuring organisations across the authority have plans in place to protect citizens, holding partners to account, escalating concerns, and offering public health advice.

UKHSA leads on responding to notifications of infectious disease and other incidents and has a South West regional health protection office operating 24/7. However, this agency alone was unable to cope with the demands of the COVID-19 pandemic, so local authorities were allocated additional responsibilities and resource to help manage local outbreaks in organisations such as care homes, schools, and local businesses. Public Health Dorset, which is the shared public health service for Dorset Council and Bournemouth, Christchurch and Poole (BCP) Council, and other local authority departments such as environmental health, social care, and education teams were key in supporting COVID-19 outbreak responses.

As the population naturally became infected by COVID-19 and people received vaccinations, national policies and resources evolved too. The additional funding local authorities received to work in this novel way is due to end in March 2023.

Public Health Dorset therefore set out to review its health protection function, to take stock of what resources existed pre-pandemic, during the pandemic, and to give consideration for what resources will be required in future. This will ensure its ability to fulfil its statutory responsibilities and gain assurance that Dorset's system is resilient and ready to respond to future health threats and hazards.



1. Resilience

The UK government has an ambition to “make the UK the most resilient nation” and, in [the Cabinet Office Resilience Strategy](#), the following principles are set out:

- We should understand the risks we face, including the impacts they could have, and our exposure to them.
- We should invest in preparation to better prevent, mitigate and recover from risks.
- We should energise and empower everyone who can make a contribution.

Each principle is one that Public Health Dorset, within its health protection function, is well positioned to promote through the Local Health Resilience Partnership (LHRP) and Dorset’s Health Protection Network. These were both reconvened in 2022, with participation from UK Health Security Agency and the South West Health Protection Team, commissioning organisations such as NHS Dorset and NHS England, local authority departments such as environmental health, housing, and social care, and local NHS Trusts.

A key focus for 2022 was a health protection review identifying areas for further development and collating lessons learned from the pandemic response for learning and building resilience, in advance of a possible call for evidence to the National COVID-19 Enquiry. Some of the key recommendations from the health protection review are:

- Strengthening local plans to respond to health protection incidents and ensure that agencies’ plans work well together
- The need to consider important topics in those plans such as port health, migrant health, and novel infections
- The importance of immunisation programmes and uncovering inequalities through data and intelligence work, working collaboratively to ensure vaccinations are offered to all who would benefit
- Recovering immunisation programmes that were paused or disrupted during the pandemic, such as school-based immunisation programmes
- The importance of good working relationships between organisations to ensure a swift and effective response to outbreaks including local press releases containing important health messages and management of local resources



2.

Infectious disease



Infectious disease across Dorset

The coronavirus pandemic and the implementation of social distancing measures and lockdown had a significant impact on the spread and detection of other infections. From July 2021 coronavirus containment measures were withdrawn in England and with this we have seen a return of cases of other infectious diseases.

What did 2022 look like?

- According to data from the UK Health Security Agency Field Service, gastrointestinal infections were the most prevalent, often related to contact with contaminated food, water and/or surfaces.
- Campylobacter (a form of food poisoning) caused the highest rate of infections in 2022.
- Both nationally and locally an unseasonal increase was seen in Scarlet Fever and Invasive Group A Streptococcal disease (iGAS) from quarter 2 to the end of the year.
- Rates of infections like mumps, pertussis and measles were low across Dorset, and have been historically.

Incidents

This report covers notable incidents of notifiable infectious disease affecting Dorset and Bournemouth, Christchurch and Poole in 2022 including:

- monkeypox
- streptococcal infections
- scabies outbreaks
- shiga-toxin producing E. Coli (STEC)
- latent TB infections in health care workers



Monkeypox (now mpox)

Cases of monkeypox were confirmed in the UK from 6 May 2022. At the time of the national notification, public health colleagues were uncertain about the transmissibility of the infection and there was some public anxiety as this was presented in the national media. However, the outbreak has mainly been in men who have sex with men or in people who have travelled from endemic areas.

The national response required sexual health clinics to screen, treat, contact trace, and eventually vaccinate once this became available for those at highest risk of becoming infected. Great care was given to ensure infection control procedures and resources were in place.

Streptococcus

In the autumn of 2022, there was an [exceptional surge in cases of streptococcal infections](#): scarlet fever and invasive group A strep (iGAS). This put additional pressure on the health system simultaneous to winter pressures. In addition, child deaths were highlighted in the national media and UKHSA issued a press release asking schools to notify of outbreaks and report co-infections with chickenpox or influenza which increases the risk of iGAS; they also set up a national hotline to take enquiries.

Although PHD is not the lead agency to respond to outbreaks of strep infections, numerous enquiries suggested public anxiety was high. PHD issued local communications working with the education system with the aim of allaying anxiety and providing local information to parents and head teachers.

Scabies

Two local hotels experienced scabies outbreaks. People affected were migrants who were offered accommodation by the Home Office. The treatment advised by UKHSA is logistically challenging and must be carefully planned. It requires collaborative work between colleagues working in UKHSA's health protection team, NHS Dorset and their commissioned providers such as pharmacies and primary care, and local authorities. Primary care is free for migrants to use, but challenges in accessing these services include the unfamiliarity of the NHS and ability to register with a GP, cultural beliefs, language barriers, temporary living situations, concerns about costs or residency implications, and trauma or mental health issues.



Shiga-toxin Producing E. Coli (STEC)

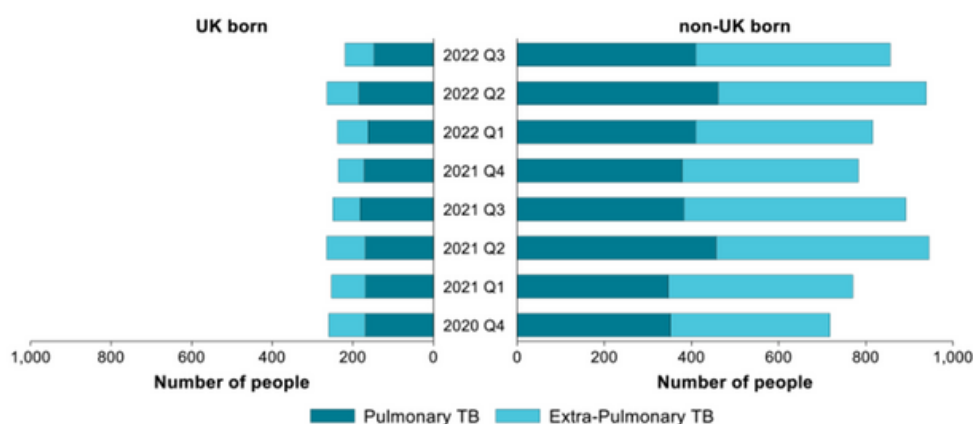
UKHSA led an investigation into a national increase in STEC between August and September 2022 with 177 confirmed cases in England, 34 in the South West, 12 in Dorset and 8 in BCP*. Following genomic sequencing, it is thought the outbreak came from a single source however this has not yet been identified. UKHSA put on weekly teaching sessions about STEC infections for health protection practitioners and environmental health officers. Environmental health officers attended outbreak meetings, interviewed cases (using enhanced surveillance questionnaires), obtained stool specimens from cases and their household contacts to ensure infections were cleared, and provided public health advice.

*Cases reported from July to September, some cases were travel acquired and likely not a part of the national outbreak; these figures should be interpreted with caution.

Latent Tuberculosis in healthcare workers from overseas

In 2022, 3,347 people were notified with Tuberculosis (TB) in England. Most cases in England are in people born outside of the UK.

Figure 1: Number of TB notifications by place of birth and site of disease, England, Q3 2020 to Q3 2022



Source: ONS National Quarterly Report of Tuberculosis in England, Q3 provisional data, updated 27 January 2023

Globally 1 in 4 people are estimated to be infected with TB. Latent Tuberculosis Infection (LTBI) is considered a dormant (or semi-dormant) stage of tuberculosis that occurs when a person is infected with TB and their immune system is preventing bacteria multiplying to cause active disease. People with LTBI may not have any symptoms and are not usually infectious. Without treatment, 5-15% will develop active disease. Immunosuppression (even mild) and some common conditions such as diabetes increases this risk.



Screening and treating people with LTBI are key prevention strategies endorsed by the World Health Organization (WHO), National Institute for Health & Care Excellence (NICE), UKHSA & NHS England. UK immigration visas only require evidence that the individual does not have active TB at the point of application. Consequently, people may arrive in the UK unaware they have LTBI. Occupational Health teams in NHS organisations usually screen their overseas staff for LTBI and refer staff with positive results to their local TB Service for treatment.

One local hospital trust has highlighted an increase in LTBI detection from new staff screening which they relate to an increase in non-UK born staff. The Trust provides its own data in Table 1. Each case requires three to six months of treatment and an average of five outpatient appointments to manage. Cases can be complex, with staff fearful of stigma and social discrimination.

Table 1: Newly appointed overseas health workers diagnosed with latent TB in one Dorset hospital trust (data from East Dorset TB Service)

Year	Number of staff diagnoses with latent TB
2017	7
2018	12
2019	13
2020	45
2021	76
2022	120 (58% increase since 2021 and 1614% increase since 2017)



Infectious disease control in healthcare settings

NHS Dorset Integrated Care Board (ICB) (formerly Dorset CCG) and Public Health Dorset are part of the Integrated Care System. The ICB monitors certain infection rates such Clostridium Difficile (C. Diff) and Staph Aureas (MRSA and MSSA) infections and provides infection prevention and control (IPC) advice to community providers such as primary care and care homes; their specialist team of IPC nurses provided critical support and advice during the coronavirus pandemic.

Building on the learning from the pandemic, Public Health Dorset is part of the Integrated Care Partnership Board which aims to develop a system strategy for curtailing infectious disease, an important part of our role in Health Protection.



3. Immunisations

After clean water, vaccinations are the most effective public health intervention in the world for saving lives and promoting good health (UKHSA).

When a high percentage of the population is immunised, it is difficult for infectious diseases to spread, because those who are immune cannot be infected. This is called herd immunity.

The commissioner for vaccination programmes is NHS England however responsibilities are due to transfer to Integrated Care Boards (NHS Dorset) in 2023/24.

Providers of vaccinations include GP practices, community pharmacies, sexual health clinics, drug and alcohol treatment services, prison health care services and NHS Trusts.

National incidents have highlighted the importance of ensuring population vaccination coverage in Dorset is high. These include:

- the detection of vaccine-derived polio in London sewage
- diphtheria cases amongst asylum seekers in England
- coronavirus, which required a reallocation of resources and staff to respond to the pandemic for example, staff redeployment to deliver COVID-19 vaccines (rather than routine vaccination programmes).



Local and national uptake of the UK routine immunisation programme (Public Health Outcomes Framework)

Indicator	Lower Threshold	Standard	Geography	2019/20	2020/21	2021/22
Population Vaccination coverage - Hepatitis B (1 year old)			BCP	100.00%	100.00%	66.70%
			Dorset	100.00%	-	-
			England			
Population Vaccination coverage - Dtap/IPV/Hib (1 year old)	90%	95%	BCP	94.30%	94.10%	94.50%
			Dorset	95.50%	95.90%	94.80%
			England	92.60%	92.00%	91.80%
Population Vaccination coverage - PCV	90%	95%	BCP	95%		
			Dorset	96.20%		
			England	93.20%		
Population Vaccination coverage - Hepatitis B (2 years old)			BCP	88.90%	100%	100%
			Dorset	100%	-	-
			England			
Population Vaccination coverage - Dtap/IPV/Hib (2 years old)	90%	95%	BCP	94.70%	95%	94%
			Dorset	96.70%	97%	97%
			England	93.80%	93.80%	93.00%
Population Vaccination coverage - MMR for one dose (2 years old)	90%	95%	BCP	93.30%	92.50%	91.20%
			Dorset	95.30%	95.10%	95.00%
			England	90.60%	90.30%	89.20%
Population Vaccination coverage - PCV booster	90%	95%	BCP	93%	92.60%	91.00%
			Dorset	95.60%	95.10%	95.00%
			England	90.40%	90.10%	89.30%
Population Vaccination coverage - Hib/MenC booster (2 years old)	90%	95%	BCP	92.90%	92.90%	91.20%
			Dorset	95.60%	95.10%	95.20%
			England	90.50%	89.80%	89.00%
Population Vaccination coverage - Flu (2-3 years old)	40%	65%	BCP	49.10%	59.30%	50.90%
			Dorset	57.30%	70.50%	61.90%
			England	43.80%	56.70%	50.10%
Population Vaccination coverage - MMR for one dose (5 years old)	90%	95%	BCP	93.30%	92.50%	91.20%
			Dorset	95.30%	95.10%	95%
			England	90.60%	90.30%	89.20%
Population Vaccination coverage - MMR for two doses (5 years old)	90%	95%	BCP	91.20%	91.90%	89.70%
			Dorset	94.40%	94.90%	93.40%
			England	86.80%	86.60%	85.70%
Population Vaccination coverage - HPV coverage for one dose (females 12-13 years old)	80%	90%	BCP	6.70%	79.30%	
			Dorset	9.50%	82.20%	
			England	59.20%	76.70%	
Population Vaccination coverage - HPV coverage for two doses (females 13-14 years old)	80%	90%	BCP	11.20%	36%	
			Dorset	11%	49.60%	
			England	64.70%	60.60%	
Population Vaccination coverage - PPV	65%	75%	BCP	69%	70.60%	
			Dorset	69.50%	70.80%	
			England	69%	70.60%	
Population Vaccination coverage - Flu (at risk individuals)	55%	55%	BCP	40.60%	52.90%	54.60%
			Dorset	47.40%	62.60%	63.10%
			England	44.90%	53%	53%
Population Vaccination coverage - Flu (Over 65's)	75%	75%	BCP	71%	78.50%	82.60%
			Dorset	74.30%	84.80%	87.10%
			England	72.40%	80.90%	82.30%
Population Vaccination coverage - Shingles (71 years old)	50%	60%	BCP	50.50%		
			Dorset	49.50%		
			England	48.20%		



Areas for focus

Fingertips is a resource used to track various public health metrics and includes immunisation uptake. Uptake locally is lower than the England average for some vaccination programmes. These include:

- Preschool vaccinations
- School-based vaccination programmes
- Vaccines for Children in Care
- Vaccines for Pregnant Women
- Pneumococcal Vaccine for people 65 years and older
- Flu vaccine for people at high risk
- Shingles vaccine for people in their 70s

Importantly, some vaccination rates may appear high however uptake in certain groups may be low (when compared with uptake for the population as a whole). For example, uptake is lowest in our most deprived communities, people with learning or physical disabilities, people who cannot easily register with the NHS for example new entrants to the UK especially those seeking asylum, children who do not attend mainstream school (because some programmes are delivered through schools), and others. Commissioners and local providers work together to identify areas of poor uptake and to make improvements.

Pre-school vaccinations

Two important vaccinations are offered to pre-school children: MMR and a combined booster vaccination for diphtheria, tetanus, pertussis, and polio (DTAP/IPV).

MMR is offered at 12 months and again at 3 years 4 months. It is important for people to have two doses of MMR vaccine which protects against measles, mumps, and rubella infection. This is because 10% of people who receive a single dose do not develop antibodies necessary to prevent infection. To ensure the whole population is protected from the spread of these infections, achieving a two-dose uptake of at least 95% is important (Green Book of Immunisations).

In Dorset and BCP rates of MMR uptake are higher than the national average however rates are decreasing. The rate in BCP had dropped from 91.9% to 89.7% (2020/21 to 2021/22).



Figure 3 - Dorset MMR uptake by age 5

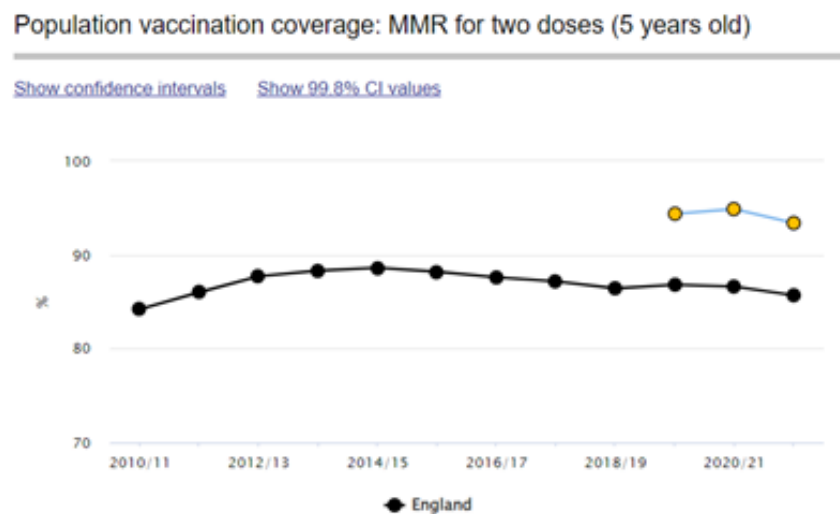
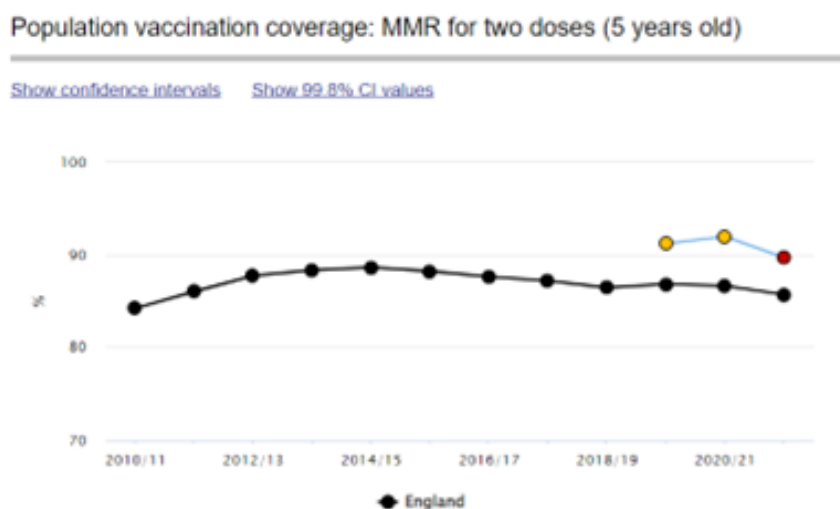


Figure 4 - BCP MMR uptake by age 5

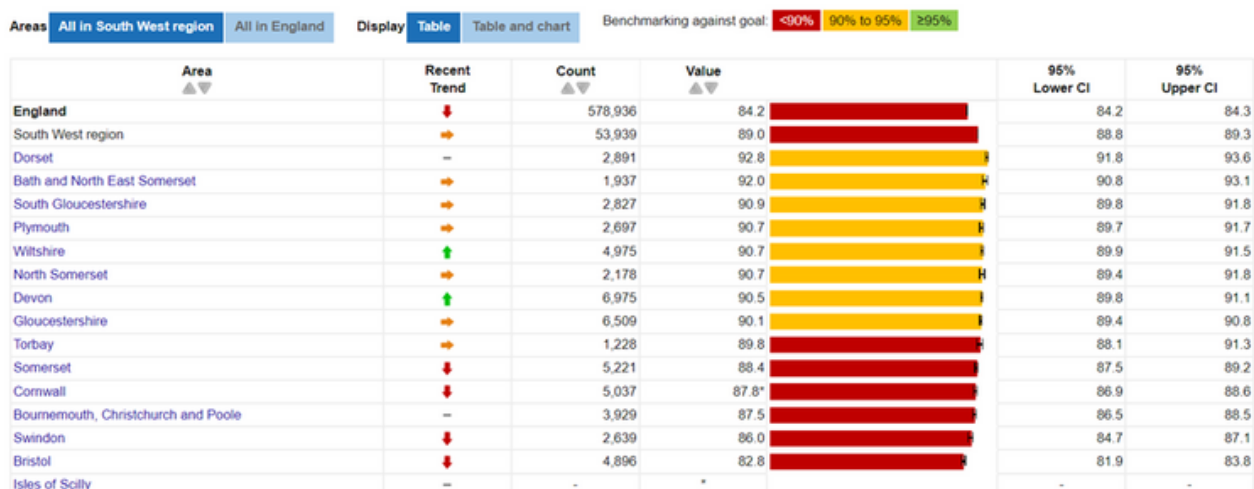


The rates in Figure 5 below for the combined pre-school booster have been decreasing since quarter two of 2020/21 to quarter one of 2022/23 and remain lower than the optimal herd immunity target 95%*. When uptake is less than 90% there is a risk that infections can spread from person to person in the community.

*as reported by NHSE Screening & Immunisation data, Maximising Immunisation Uptake Group slides, Dec 2022.



Figure 5: Population vaccination coverage: DTaP and IPV booster (5 years) 2021/22



School-based vaccinations

The Screening & Immunisation Team at NHS England note this year's school aged immunisation programme was interrupted due to COVID-19 with some school visits having to be cancelled during the academic year and as a result reported vaccination update is lower. As a part of their recovery plan, these schools were visited the following year to ensure everyone was offered vaccination.

School based vaccinations include: influenza, human papilloma virus (HPV) which protects against cervical cancer and is now offered to both girls and boys, meningitis (Men ACWY), and a combined vaccine for tetanus & polio. See [Fingertips](#) for more detail.

Vaccinations for children in care

Children in care require a health review when entering the service and therefore should be easily identifiable. The rate of children in care (CIC) is 68 and 66 per 10,000 children in Dorset and BCP respectively. The latest data from 2021, shows vaccination uptake for CIC is 80% (Dorset) and 84% (BCP). This is similar (Dorset) or worse (BCP) than uptake achieved in other similar areas (CIPFA neighbours) ([Public Health Profiles](#)).

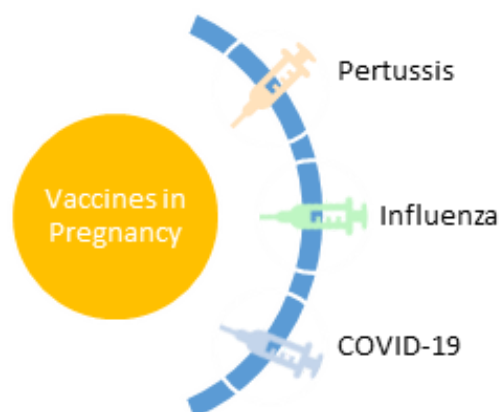


Figure 6: Children in care vaccination uptake (2021)



Vaccination for pregnant women

Two vaccinations are offered to pregnant women to protect mothers and infants: pertussis (whooping cough) and influenza. Pregnant women should also be offered COVID-19 vaccination if not up to date.

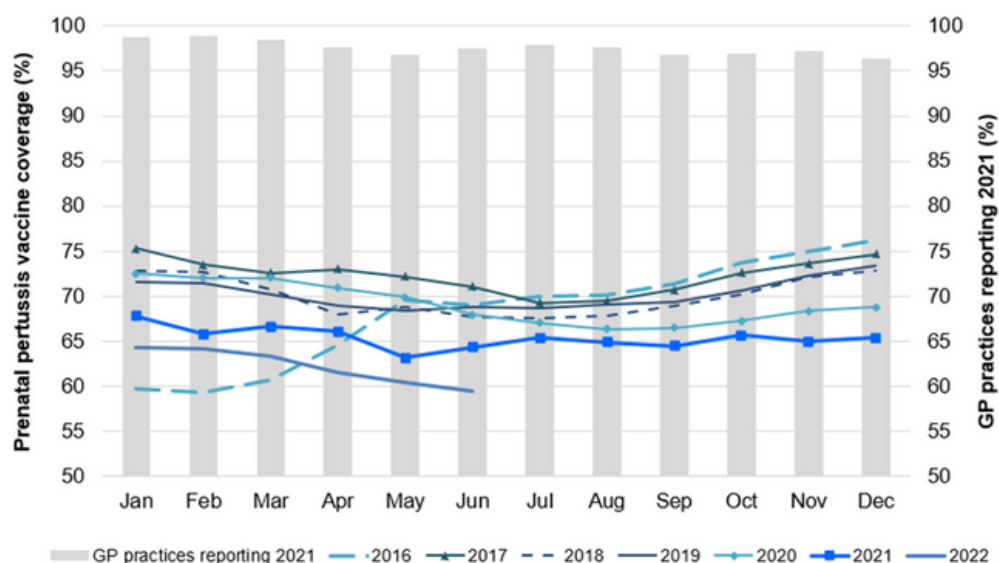


Pertussis

Pertussis vaccination is ideally offered to women between 16 and 32 weeks of each pregnancy, although it can be given up until she is in labour. This gives the best chance of maximising passive immunity to the infant. The vaccine was first offered to women in pregnancy around 2012 after cases of pertussis in infants under three months rose nationally from approximately 50 cases to 250 cases per 100,000 population. Prior to 2019, the England uptake was approximately 75% however this has steadily decreased to less than 60%.

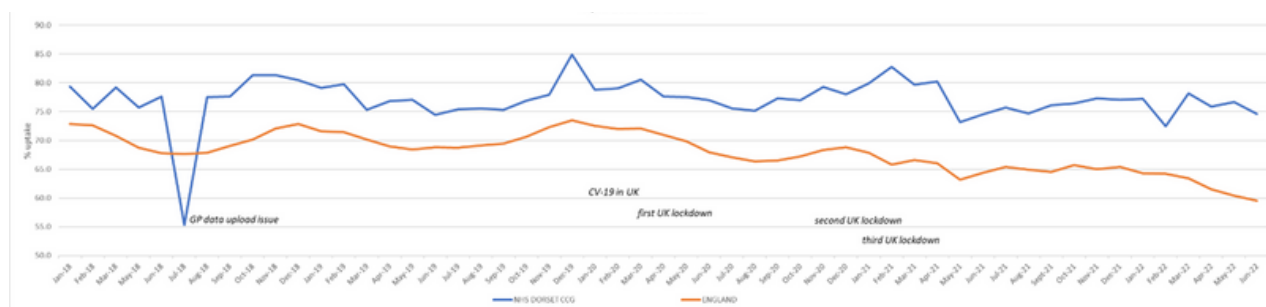


Figure 7: Monthly pertussis vaccination coverage (%) in pregnant women (England), 2016 to 2022



Data from April 2015 to June 2022 shows the pandemic may have had an impact on local vaccine uptake, for example uptake decreases from March to August 2020 which correlates to the pandemic taking hold in the UK and the first lockdown. However, the same impact was not realised across Dorset ICS following the second and third lockdowns (see Figure 8).

Figure 8: Pertussis vaccine uptake in pregnant women (Dorset & England, April 2015-June 2022)



Influenza

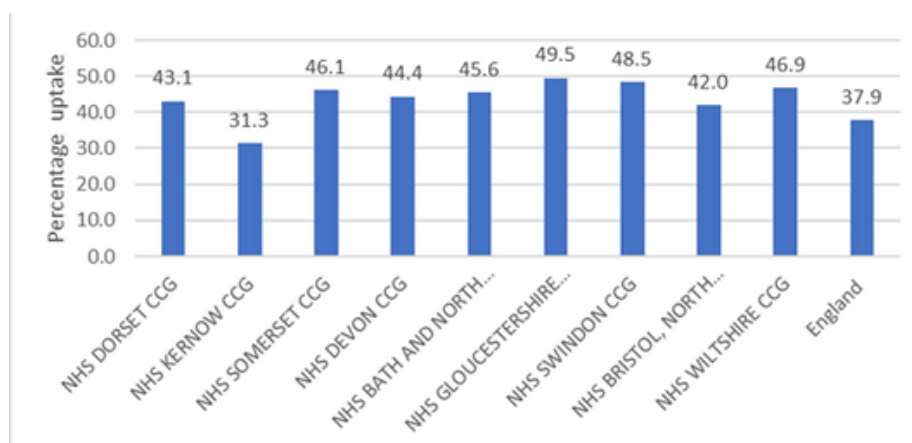
Influenza vaccine should be offered to pregnant women to reduce their risk of serious illness or delivering pre-term if infected. Passive immunity is also advantageous to infants in the first few months of life ([Green Book of Immunisation](#)). Since flu vaccination became available to pregnant women in 2010/11, each year less than half who are eligible are vaccinated.



In England, uptake has ranged from 27.4% (2011/12) to 47.2% (2017/18). The uptake of influenza vaccine by pregnant women is difficult to estimate as it is more challenging to determine a denominator accurately. Data presented in [Table 19.3 in The Green Book](#) may underestimate uptake.

In February 2022, Dorset CCG reported 43.1% of pregnant women were vaccinated against flu; other CCGs in the South West, such as Gloucestershire have achieved rates of 49.5%.

Figure 9: Flu vaccination for pregnant women (Feb 2022)



Coronavirus

The coronavirus vaccination programme was offered to the general population by risk group and age. Pregnant women are considered a high-risk group given the severity of illness experienced if infected; their vaccination status should be reviewed vaccine offered as necessary. At present, data on coronavirus vaccination in pregnant women is not available.

It is important to ensure pregnant women are offered vaccination in pregnancy. NHSE report the pandemic has had an impact and commissioners are looking to ensure vaccination services are easily accessible, for example within all local antenatal services. In addition, there is work ongoing to ensure data quality is robust and that there are enough staff trained to give vaccinations.

NHSE support uptake of vaccinations in pregnancy

- Quarterly Vaccines In Pregnancy (ViP) Network meetings
- Monthly SW Maternity Collaboration for COVID-19 vaccination to discuss point of care access, ways to support staff to have vaccine confidence and develop regional communication materials
- Work to improve data quality (denominator, uploading issues, administrative workload, reporting delays)
- Commissioner to meet with NHS Trusts more frequently & undertake Key Lines of Enquiry work
- Offer vaccination to pregnant women in each maternity service



Pneumococcal vaccine (65+)

The pneumococcal polysaccharide vaccine (PPV) is given once to people aged 65+ and to people who have additional risk of poorer health outcomes if infected which is associated with certain chronic conditions or occupations (eg, welders) (see Green Book, p 6-8).

OHID provides data on PPV uptake for people who are aged 65 or older only; the target is 75% uptake. 70.8% of Dorset's eligible* population was immunised in 2020/21; 69.7% in BCP. Dorset and BCP have not yet achieved the target though are in line with the England average. There is a slight decrease in uptake over the past two years in BCP (69.9% to 69.7% in 2019/20 to 2020/21).

NHSE reported an ongoing 5-year shortage of PPV vaccination at Dorset's Health Protection Network meeting on the 12th October 2022. High risk individuals are currently being prioritised.

*Eligible population is not defined by OHID on FingerTips. The raw data appears to only include people aged 65 or older. This therefore excludes eligible people who are under 65 who are eligible by chronic condition or occupation.

Figure 10: PPV uptake for people aged 65+ in Dorset

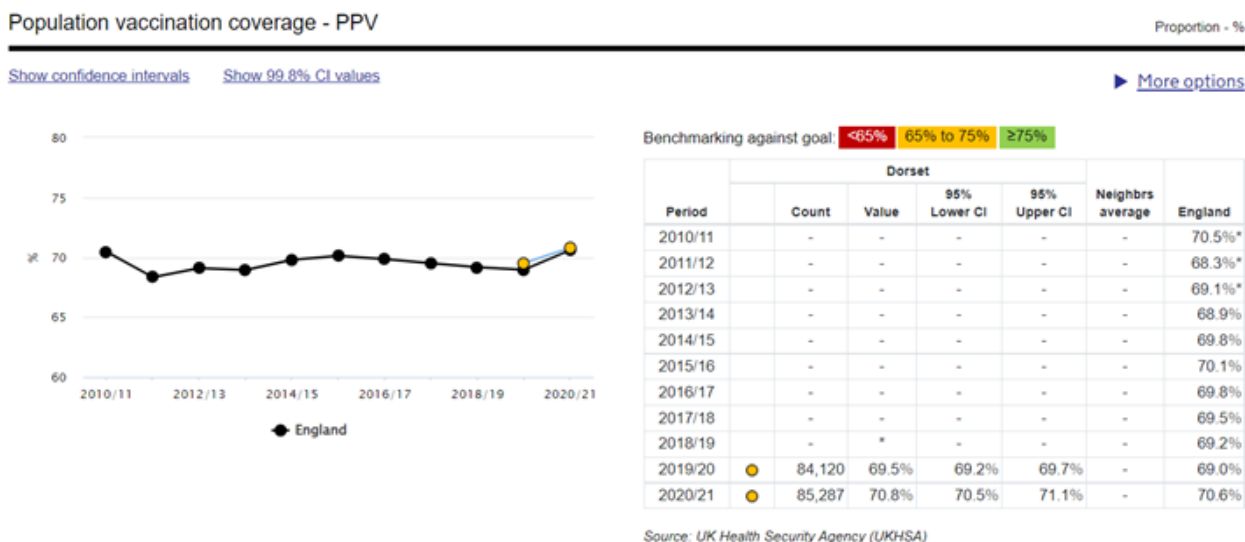


Figure 11: PPV uptake for people aged 65+ in BCP

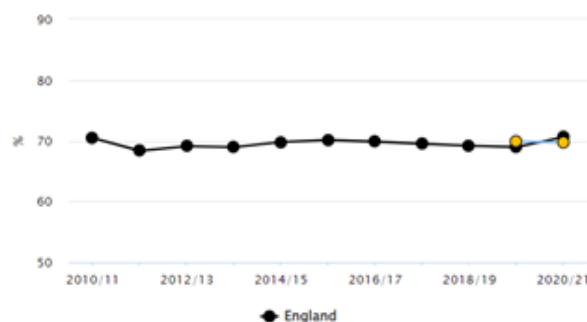
Population vaccination coverage - PPV

Proportion - %

[Show confidence intervals](#)

[Show 99.8% CI values](#)

[More options](#)



Recent trend: Could not be calculated

Benchmarking against goal: <65% 65% to 75% ≥75%

Period	Bournemouth, Christchurch and Poole				South West	England
	Count	Value	95% Lower CI	95% Upper CI		
2010/11	-	-	-	-	71.2%*	70.5%*
2011/12	-	-	-	-	67.5%*	68.3%*
2012/13	-	-	-	-	69.4%*	69.1%*
2013/14	-	-	-	-	69.3%	68.9%
2014/15	-	-	-	-	69.5%	69.8%
2015/16	-	-	-	-	69.7%*	70.1%
2016/17	-	-	-	-	69.7%	69.8%
2017/18	-	-	-	-	69.2%	69.5%
2018/19	-	-	-	-	69.0%	69.2%
2019/20	54,618	69.9%	69.6%	70.2%	69.0%	69.0%
2020/21	54,386	69.7%	69.4%	70.0%	70.6%	70.6%

Source: UK Health Security Agency (UKHSA)

Flu vaccine for at risk individuals

Individuals with chronic conditions have a higher risk of death if infected with flu, compared to people who do not have a chronic condition. The Department of Health recommends these groups (see table 19 [here](#)) are offered annual flu vaccination. A target uptake of at least 55% should be met.

In 2020/21, 63.1% of Dorset's at-risk population and 54.6% of BCP's at-risk population were vaccinated against flu.

Figure 12: Dorset and BCP flu vaccination uptake for at-risk individuals amongst CIPFA neighbours (2020/21)

Areas: **Dorset and neighbours** All in England Display: **Table** Table and chart Benchmarking against goal: <55% ≥55%

Area	Recent Trend	Neighbour Rank	Count	Value	95% Lower CI	95% Upper CI
England	↑	-	4,305,656	52.9	52.9	53.0
Neighbours average	-	-	411,789	58.8*	58.6	58.9
Rutland	-	10	3,204	64.0	62.6	65.3
Northumberland	↑	4	30,799	63.4	63.0	63.8
Dorset	-	-	29,434	63.1	62.6	63.5
East Riding of Yorkshire	↑	1	23,108	62.8	62.3	63.3
South Gloucestershire	↑	14	24,701	60.9	60.4	61.4
North Somerset	↑	5	19,960	60.9	60.4	61.4
Shropshire	↑	2	26,497	60.6	60.1	61.0
Wiltshire	↑	6	39,598	60.5	60.1	60.9
Cheshire West and Chester	↑	9	32,003	58.6	58.2	59.0
Cheshire East	↑	3	35,328	57.9	57.5	58.3
Solihull	↑	12	17,285	57.8	57.2	58.3
Cornwall	↑	8	46,812	56.2	55.8	56.5
Central Bedfordshire	↑	13	20,433	55.5	55.0	56.0
Isle of Wight	↑	7	10,314	55.5	54.8	56.2
Bournemouth, Christchurch and Poole	-	15	31,297	54.6	54.1	55.0
Sefton	↑	11	21,016	52.9	52.4	53.4

Source: <https://www.gov.uk/government/collections/vaccine-uptake#seasonal-flu-vaccine-uptake-figures>



Across both local authorities, there have been improvements in flu vaccine uptake for at-risk groups since 2018/19. However, uptake in BCP remains just under target (54.6%).

Figure 13: Flu vaccination coverage for at-risk individuals in Dorset (2010/11-2020/21)

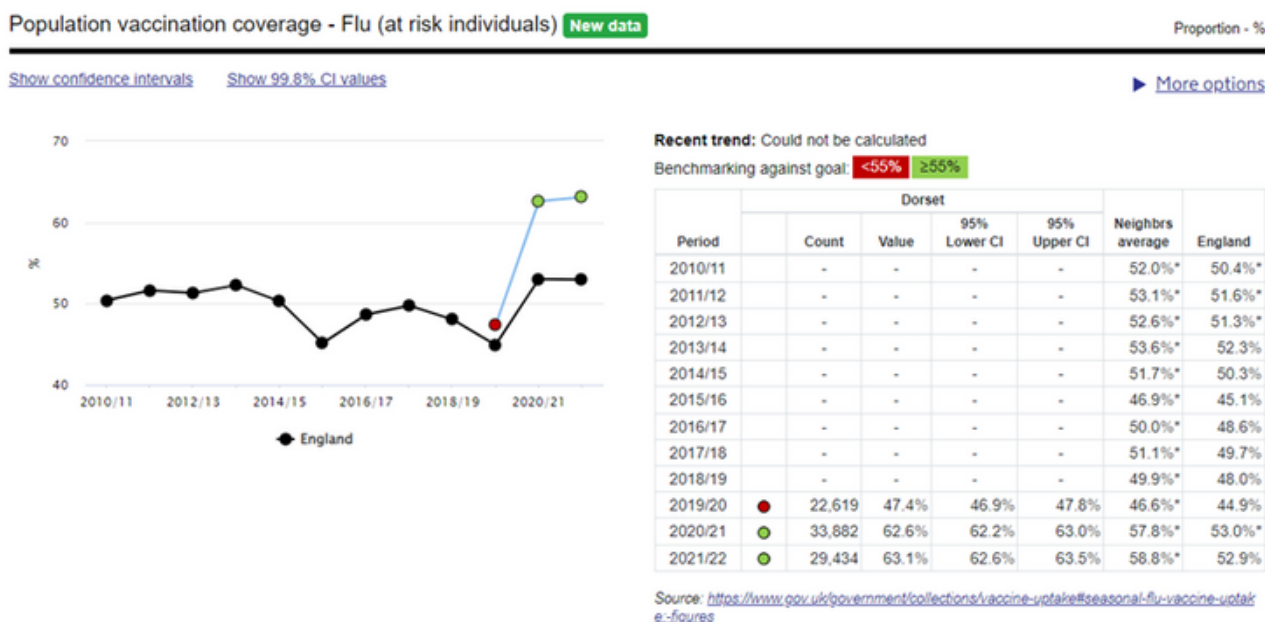
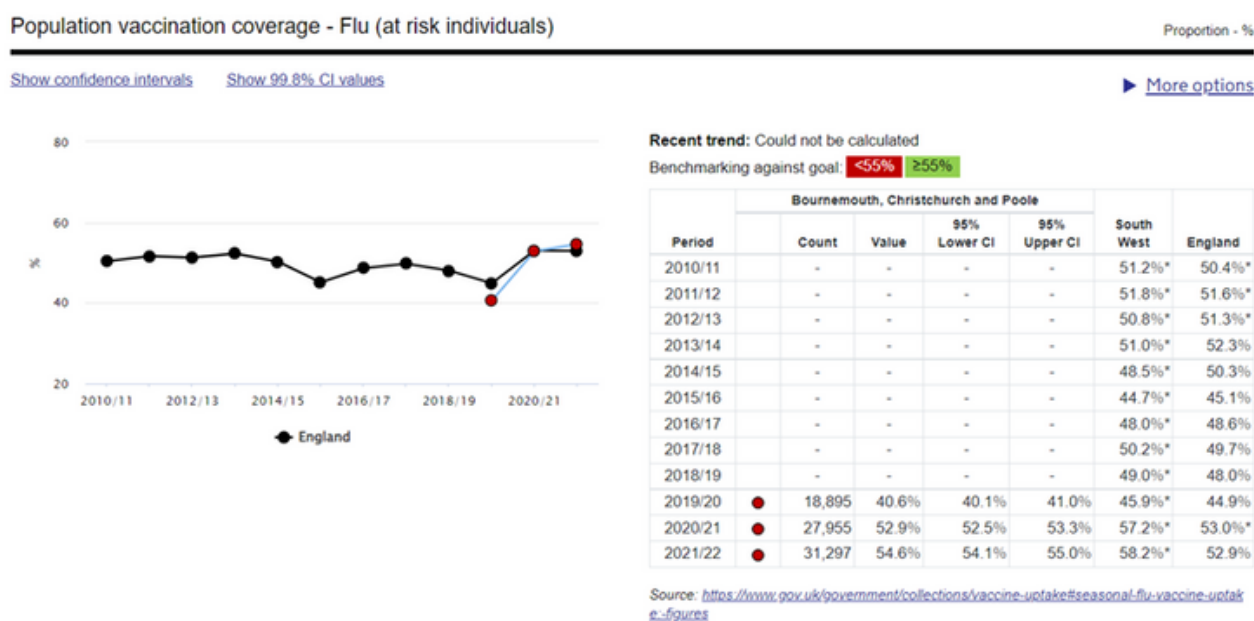


Figure 14: Flu vaccination coverage for at-risk individuals in Bournemouth, Christchurch and Poole (2010/11-2020/21)

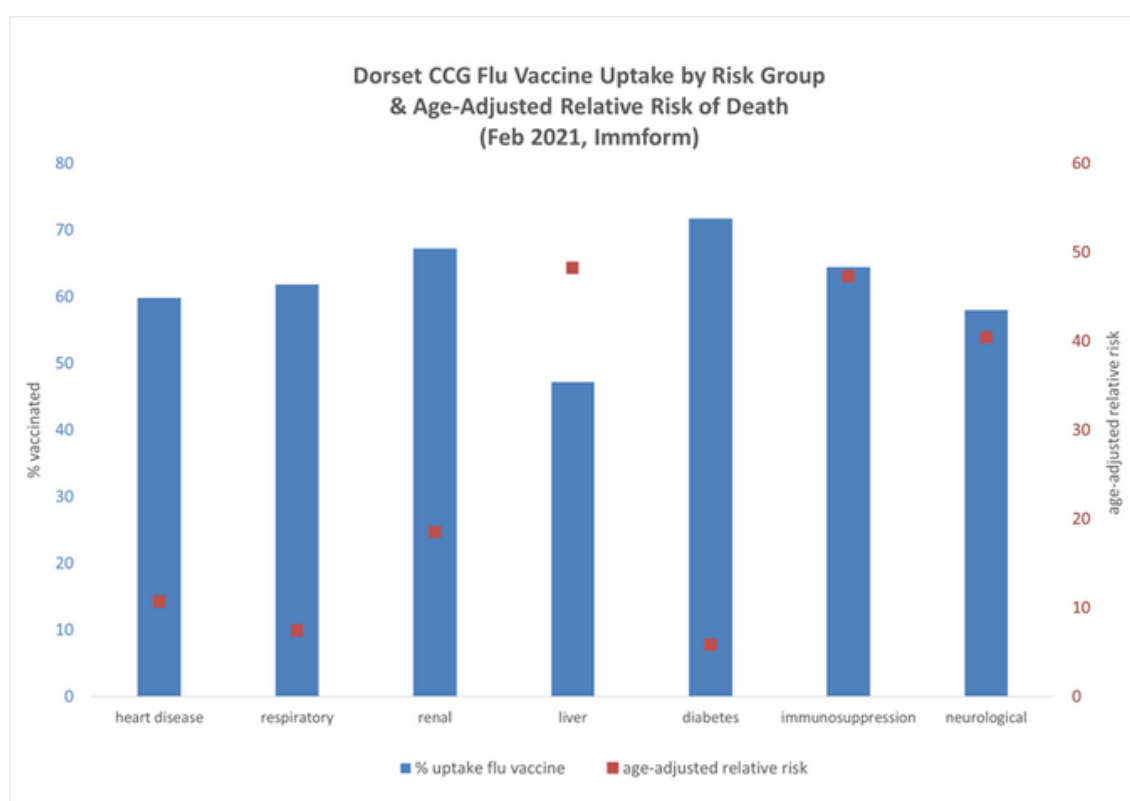


Below, vaccine uptake by selected risk group is set out alongside relative risk of death[1]. People with chronic liver disease are nearly 50 times more likely to die if infected with flu (compared to someone who is not in a risk group); in 2020/21 GPs report vaccination uptake for this cohort was less than 50%[2]. In addition, there are opportunities for improving flu uptake by reviewing primary care data and focusing on inequalities, as set out in the NHS CORE20PLUS strategy .

[1] Age-adjusted relative risk from DH Green Book Chapter 19: Influenza. Accessed 26.9.22.

[2] Age adjusted relative risk, 95% CI, baseline defined as those not in a risk category.

Figure 15. Dorset CCG Flu Vaccine Uptake by Risk Group & Age-Adjusted Relative Risk of Death (Feb 2021)

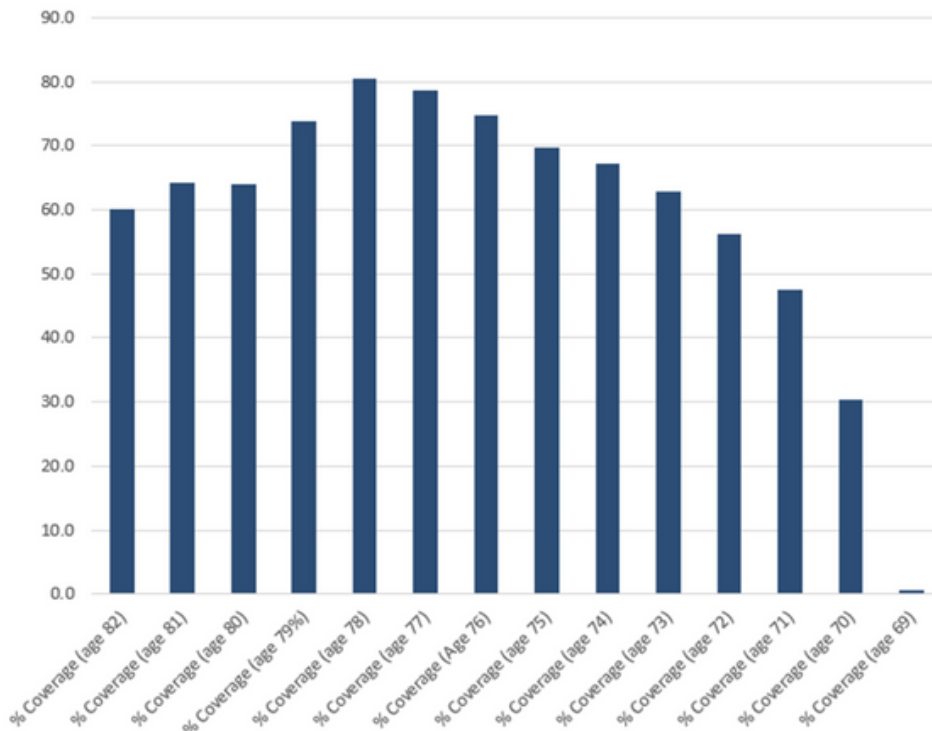


Shingles vaccine for people in their 70s

Shingles is a reactivation of the chickenpox virus, which lies dormant in the nerves of our spine. When the body's immune defences weaken, the virus reactivates and causes a painful rash. The vaccine helps to prevent or reduce the severity of this rash. Everyone in their 70s is eligible for the vaccine. There is an aspirational target set by commissioners (NHSE) for GPs to vaccinate 50-60% of patients in their 70s before they turn 80. There is a focus to drive improvements in primary care settings in the 20% most deprived areas across Dorset & BCP.



Total Shingles vaccine coverage - cohort vaccinated at any time who are of this age between 01/04/2021 and 23/03/2022



Source: NHSE & NHSI, South West S7a Screening and Immunisation Report for Dorset Health Protection Network. 12 July 2022.

Coronavirus vaccine

Fingertips data does not yet include population coverage statistics for coronavirus vaccination but given the recent pandemic years it is worth noting the achievement of local healthcare workers and the general population to both set up and take up this offer to protect themselves, their families, and others.

The World Health Organisation suggests “Countries should continue to work towards vaccinating at least 70% of their populations, prioritizing the vaccination of 100% of health workers and 100% of the most vulnerable groups, including people who are over 60 years of age and those who are immunocompromised or have underlying health conditions.” [WHO](#)



Coronavirus vaccination uptake for Dorset and BCP (as of 1 Feb 23)

Indicator	Geography	Feb-23
Population Vaccination coverage - COVID-19 1st dose (aged 12+)	BCP	80.5%
	Dorset	89.1%
Population Vaccination coverage - COVID-19 2nd dose (aged 12+)	BCP	77.5%
	Dorset	86.6%
Population Vaccination coverage - COVID-19 Booster or 3rd dose (aged 12+)	BCP	63.7%
	Dorset	75.8%
Population Vaccination coverage - COVID-19 Autumn Booster (aged 50+)	BCP	69.2%
	Dorset	77.6%

Dorset Healthcare leads on using local health data to identify and offer vaccine to those who have not yet taken up the offer. Their approach to improve uptake focuses on: CORE20+5 or the 20% most deprived people in the population plus people who are at risk of hospitalisation, have an increased risk of poor health outcomes due to respiratory disease, lower age groups, ethnic minorities, people with learning disabilities, people who have severe mental illness, and pregnant women. In addition, there is focus on six neighbourhoods which include communities who are affluent but frail, have low incomes and poor access to health and social care services, and who have low income with poor attitudes to health. There is a recognition that neighbourhoods require bespoke immunisation offers including “hyper local” communications.



4. Environmental hazards

According to Public Health England (now UKHSA), air quality (AQ) is the biggest environmental risk to human health. Short-term exposure can exacerbate cardiac and pulmonary (lung) conditions such as asthma, whilst long term exposure reduces life expectancy ([Health matters: Air pollution](#)). Although coastal areas such as Dorset and BCP benefit from coastal breezes and outdoor air quality is generally good (see Figure 2), there are some important outdoor areas routinely monitored by the local authority.

Indoor air quality is equally important. In 2022, national media reported coroner's conclusions that a two-year old boy died in Rochdale from chronic exposure to indoor black mould while tenant in Rochdale Boroughwide Housing in 2020. This story has raised the profile of the importance of good indoor air quality and vulnerabilities of children and migrants.

Figure 2: Key local outdoor air quality statistics

Indicator	Geography	2019	2020	2021
Air pollution: annual concentration of fine particulate matter (total PM2.5, adjusted to account for population exposure)	BCP	8.2	7.6	7.2
	Dorset	7.4	6.7	6.5
	England	9.6	7.5	7.4
Fraction of mortality attributable to particulate air pollution	BCP	6.1%	5.7%	5.4%
	Dorset	5.5%	5.0%	4.9%
	England	7.1%	5.6%	5.5%

Source: [OHID Public Health Profiles](#), [DEFRA](#)

Pollutants of interest locally include nitrogen dioxide (NO₂) and particulate matter (PM_{2.5}).



Nitrogen Dioxide (NO2)

[NO2](#) primarily comes from traffic and causes inflammation in the respiratory tract. To monitor the concentration of these pollutants, Dorset Council has placed 54 NO2 monitoring tubes across the locality and publishes the readings in an annual [AQ status report](#). If annual results indicate an [exceedance](#), the area becomes an Air Quality Management Area (AQMA) and a plan is put in place to address the exceedance.

There are two AQMAs in Dorset:

- Dorchester (expected to be de-designated as air quality has improved over past few years)
- An area near the A35 in Chideock where vehicles must accelerate up a hill to leave the village and where nearby buildings create a canyon effect stagnating air flow

There are 82 NO2 diffusion tube monitoring sites across Bournemouth, Christchurch and Poole plus two real-time pollution monitors which provide [hourly information to the public](#). Data from these sites showed no exceedance of the annual mean NO2 in the past three years and a general decrease in NO2 concentration.

BCP has two AQMAs, declared for exceedance of the annual mean NO2 along two roads in Poole because of a canyon-effect from buildings which causes stagnant air. Air Quality Action Plans (AQAPs) were drawn up and measures implemented. DEFRA has agreed with the local authority's conclusions in the BCP Council Annual Status Report that NO2 concentrations have consistently remained below set objectives and that both AQMAs can be revoked.

A general reduction in NO2 has been realised as national government initiatives on tailgate emissions and green policies have evolved. Improving air quality locally requires a collaborative approach between agencies. For example, National Highways who look after England's major roads and motorways, have reduced the speed limit from 40 to 30 mph in Chideock. Other measures related to green travel and planning policies can also make a positive impact.

Particulate Matter (PM2.5) - pollutants most harmful to human health

Particulate matter less than 2.5 microns are very small pollutants that can be inhaled deep into the lungs and cause ill health. The Environment Act 2021 proposed two threshold limits for PM2.5 though these have not officially commenced. To provide an understanding of background levels, there are six monitoring sites across BCP and Dorset, five were set to measure PM2.5 around schools. There has been no exceedance in PM2.5 for three years. Therefore, environmental health colleagues anticipate Dorset's metrics will be below thresholds.



Data from the two real-time sites in BCP demonstrate there has been no exceedance of the annual mean PM2.5 air quality objective for the past four years. DEFRA background data indicates that >55% of the PM2.5 concentrations across the BCP comprises secondary particulates from atmospheric chemical reactions, rather than primary emissions.

A solid fuel project, funded by DEFRA, has commenced to understand the habits of people who burn solid fuel with an aspiration to promote behaviour change through an information campaign. Residents in three locations will be surveyed; these are: Swanage, Bridport, Maiden Newton. This will be followed by an information campaign around efficient fuel burning. The survey will be repeated in 12 months to compare burning habits of residents pre- and post- campaign.

Environmental health colleagues influence air quality via an industrial permitting and monitoring process. Compliance is checked for example in quarries and petrol stations. AQ plans and reports are published on the councils' website.

- [West Dorset](#)
- [Weymouth & Portland](#)
- [Dorset's local transport plan](#)
- BCP Council ASRs, AQAPs and air quality information: [Air quality \(bpcouncil.gov.uk\)](https://www.bpcouncil.gov.uk/air-quality)

Following a consultation period, a National Air Quality Strategy will be published in 2023 and subsequently, revisions to the statutory local air quality management policy and technical guidance may be required.

Black mould and indoor air quality

Following the death of a child in Rochdale and the coroner's conclusion it was related to black mould, the Secretary of State and directors at Department for Levelling Up, Housing, and Communities (DLUHC) wrote to local authorities asking for assessments of damp and mould issues in rented housing. Our local councils provided replies and continue to explore the issue locally. One key consideration is the method in which housing hazards are assessed and the priority score subsequently given to damp and mould against other hazards such as falls risk or extreme temperatures.

Social landlords are responsible for ensuring their properties are free from damp insofar as the structure and state of repair causes or contributes to damp and mould conditions. Where the lifestyle of the tenants contributes to damp and mould, the Regulatory of Social Housing expects social landlords to provide advice and information on ways to reduce damp and mould and to signpost to agencies that can provide further assistance, including financial support for heating.



Whilst the picture is incomplete, the Regulator of Social Housing estimates that less than 0.2% of social homes have the most serious damp and mould problems, 1-2% have serious damp and mould problems, and a further 3-4% have notable damp and mould. Most social landlords understand the extent of damp and mould in their tenants' homes and take action to tackle it but could strengthen their approach. The majority of people living in social housing however have homes that are free from damp and mould.

Private landlords have the same responsibilities as social landlords in terms of ensuring that the structure and repair of their properties do not cause or contribute to damp and mould. Councils have powers to require private landlords to remedy damp and mould, subject to risk analysis using a methodology contained within the Housing Health & Safety Rating System (HHSRS).

In the BCP Council area, for the 3 years to December 2022, just 14 of the 624 HHSRS 'Category 1' hazards related to damp and mould. Councils are obliged to take enforcement action for Category 1 hazards. However, 345 of the 622 'Category 2' hazards related to damp and mould, albeit councils are not obliged to take action for Category 2 hazards.

BCP Council Private Sector Housing Team has developed an action plan to identify and remedy damp and mould in privately rented properties. This includes identifying unlicensed houses in multiple occupation (HMOs); prioritising Category 1 and 2 hazards where damp and mould is identified; conducting full HHSRS assessments for damp and mould following tenants' complaints of disrepair; providing information and advice for tenants in relation to services and financial support for the provision of insulation and heating; targeting rogue landlords and landlords needing assistance or advice; working with partner agencies to raise awareness amongst their staff who may visit tenants in their homes; and exploiting information available from SAP Ratings (the calculation made to produce a predicted energy assessment), complaints records, council tax and housing benefit records etc, to identify areas where more tenants on low incomes are likely to be affected by disrepair and damp and target these localities accordingly.

Avian influenza

Avian influenza (bird flu, H5N1) is a highly pathogenic infection that affects wild and captive birds. The risk to the general human population is very low, however people in contact with infected birds are at higher risk of becoming infected.

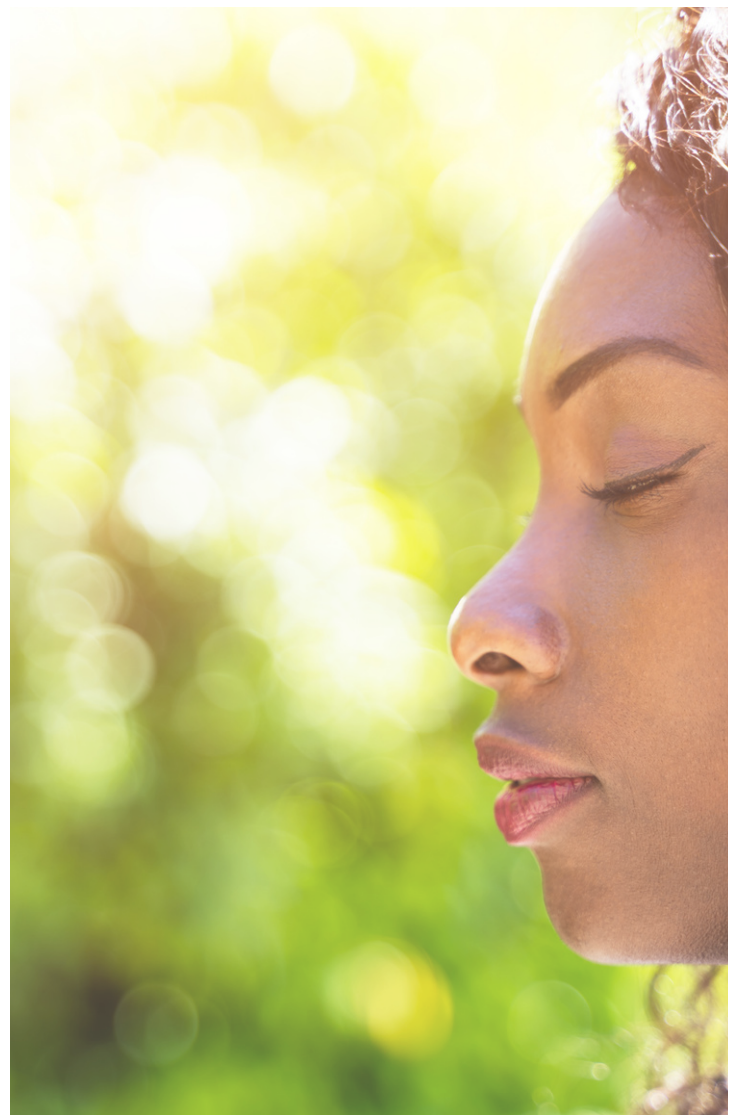
Several agencies are involved in managing avian influenza. Local authorities work collaboratively with the Department for Environment, Food and Rural Affairs (DEFRA) and the Animal & Plant Health Agency (APHA) to contain avian infections in birds and with UKHSA to manage infection in humans.



Avian Flu in birds was confirmed in the local area in 2022 in swans and geese kept on farms and at a swannery. There were also numerous birds found dead on Portland which raised public concern. Local public health action includes contact tracing of exposed humans and offering antiviral treatment if necessary.

In addition, local authority environmental health teams and the APHA contact residents within a 3km perimeter of an incident to conduct further surveillance and ensure [national guidance](#) is followed by bird keepers.

The national picture continues with restrictions still in place to house kept birds. Numerous resources are available to keep the public informed including a [DEFRA hotline](#), [maps showing affected areas](#), and text messaging alert services.



With thanks to:

- Dorset Council - Food, Safety and Port Health
- Dorset Council - Housing Standards and Community Safety
- Bournemouth, Christchurch and Poole Council - Environmental Health
- East Dorset TB Service
- UK Health Security Agency South West
- NHS England Screening & Immunisation
- Dorset HealthCare - Vaccinations
- Public Health Dorset

For more information about Public Health Dorset you can find us on:

- Our website: publichealthdorset.org.uk
- [Twitter: @healthydorset](https://twitter.com/healthydorset)
- [LinkedIn: Public Health Dorset](https://www.linkedin.com/company/public-health-dorset)
- [Facebook: Public Health Dorset](https://www.facebook.com/publichealthdorset)
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