Airborne Orbivirus Assessment
No. 2025/03
11 June 2025

Risk of airborne introduction of BTV and EHDV to Great Britain from the near Continent

Time period: 28 May to 10 June 2025.

This report describes the opinion of the Airborne Orbivirus Risk Assessment Group on the retrospective risk of entry of bluetongue virus (BTV) or epizootic haemorrhagic disease virus (EHDV)- infected midges into Great Britain (GB) from the near Continent over the previous two weeks. It does not attempt to predict the future risk of virus entry or consider the historical risk earlier than the time period stated above. The risk assessment group comprises experts from the Met Office, The Pirbright Institute, the Animal and Plant Health Agency, and the UK Office for SPS Trade Assurance.

This is a qualitative risk assessment, meaning that we estimate risk and uncertainty using words rather than numbers. The risk and uncertainty levels we use are described in Appendix A.

Incursion risk

We estimate the overall risk of airborne introduction of infectious BTV-infected midges to GB from both French and Belgian sources over the last two weeks to have been “Very Low”, meaning that it is very unlikely but not impossible that infectious BTV-infected midges could have blown into GB from these countries over the last two weeks. We have moderate uncertainty in these estimates, meaning that we have had to rely to some degree on expert opinion.

We estimate the overall risk of airborne introduction of infectious BTV infected midges to GB from other countries on the near Continent to have been “Negligible”, meaning that the risk was low enough to not merit consideration. The model of midge movement does not indicate a risk of airborne vector incursion from these countries.

This represents an overall “Very Low” risk of airborne introduction of infectious BTV-infected midges to GB from the near Continent over the last two weeks, meaning that it is very unlikely to have occurred.

We estimate the overall risk of airborne introduction of infectious EHDV-infected midges to GB from the near Continent to have been “Negligible”, meaning that the risk was low enough to not merit consideration.

We estimate the risk of the airborne incursion of midges infected with BTV and EHDV into GB over the last two weeks by first inspecting the outputs of a simulation model of this movement process from selected coastal locations in the near Continent (France, Belgium, the Netherlands, Germany, and Denmark). Through discussion within the risk assessment group, we agree on a single estimate of the “risk of vector incursion” from each source country (shown in Section 1 of this report). As these risk estimates do not consider midge infection status, we then discuss within the group what the “risk of incursion of infectious virus-infected vectors” from each source country would be for BTV and for EHDV from each source country. To do this, we consider the epidemiological situation in each country (including both recent reports of livestock infection and recent temperature conditions, as infected vectors can only become infectious if temperatures are suitably high for a period of time) as well as the vector incursion risk. Due to the difficulties in inferring vector infection status from limited data on livestock infection, we also estimate the level of uncertainty in these estimates, which describes the degree to we have needed to fill gaps in our knowledge of the potential risk using expert opinion. These estimates are shown in Section 2 (BTV) and Section 3 (EHDV) of this report.

Spread risk

We estimate that the risk of spread of BTV over the last two weeks if incursions did occur was “Low” in the South East and East Anglia regions of coastal England, and “Very Low” in the South West and North East regions (see Appendix C for regions). This means that temperatures in the South East and East Anglia were unlikely to have been suitable for sustained BTV transmission by vectors over the previous two weeks, and those in the South West and North East were very unlikely to have been suitable for sustained BTV transmission.

We consider vector activity and temperatures in coastal and near-coastal areas in the south and east of England (the areas of GB most at risk of airborne virus incursions) over the previous two weeks to estimate the potential risk of sustained onward spread of BTV within these areas should an incursion have occurred. We consider four regions in this assessment: the South West; the South East; East Anglia; and the North East (highlighted in Appendix C), and these region-specific risk estimates are shown in section 4 of this report. Note that these risk estimates only consider the spread risk from infectious vectors entering the country over the previous two weeks in these regions and does not consider the risk of spread from vectors infected before this time (such as any previously infected vectors which may have survived the winter months, which we consider to be a rare occurrence). We also do not consider the risk of intermittent transmission events from small numbers of infectious vectors, but focus on the risk of larger scale outbreaks, where temperature conditions allow the cycle of virus transmission between vectors and livestock to be perpetuated.

Other information

Preliminary outbreak assessments of the BTV and EHDV situation in Europe are available, which also consider other potential routes of virus entry.

Read about Bluetongue virus in Europe (GOV.UK) and Epizootic haemorrhagic disease in Europe (GOV.UK)

Risk summaries

More details on our risk estimates and the evidence underlying these are provided in the six tables in the report below. This includes a single table detailing our estimate of the risk of incursion of midge vectors (regardless of infection status) from each high-risk source country (with this risk shown in the top row of the table), and two tables which describe the risk of airborne incursions of each of BTV and EHDV. These tables include:

- Our estimate of the risk of incursion of infectious midge vectors from each high-risk source country (with this risk shown in the top row of the table).
- Our estimate of the uncertainty surrounding the country-specific risk of incursion of infectious vectors, accounting for our knowledge of relevant processes and the available data (with this uncertainty shown as the top row of the table).

We also provide a table showing our estimates of the risk of virus spread within high-risk areas of GB (which considers both vector feeding behaviour and temperature suitability for virus replication and spread).

1. Risk of airborne vector incursions into GB from high-risk countries on the Continent.

Country-specific risk of airborne incursion of vectors

	France	**Belgium**	**Netherlands**	**Germany**	**Denmark**
Risk of vector incursion into GB from source country	Low: It is unlikely that midges have been blown into GB over the previous two weeks.	Very Low: It is very unlikely but not impossible that midges have been blown into GB over the previous two weeks.	Negligible: No midges are expected to have been blown into GB over the previous two weeks.	Negligible: No midges are expected to have been blown into GB over the previous two weeks.	Negligible: No midges are expected to have been blown into GB over the previous two weeks.
Incursion risk distribution	Potential risk of vector incursions in South West and South East.	Potential risk of vector incursions in South East and East Anglia.	Not Applicable.	Not Applicable.	Not Applicable.

2. Risk of airborne BTV incursion into GB from high-risk countries on the Continent (risk of incursion of infectious midge vectors)

Country-specific risk of airborne incursion of BTV-infectious vectors

	France	Belgium	Netherlands	Germany	Denmark
Risk of incursion of infectious BTV-infected vectors into GB from source country	Very Low: It is very unlikely but not impossible that BTV-infected midges have been blown into GB over the previous two weeks.	Very Low: It is very unlikely but not impossible that BTV-infected midges have been blown into GB over the previous two weeks.	Negligible: No infectious BTV-infected midges are expected to have been blown into GB over the previous two weeks.	Negligible: No infectious BTV-infected midges are expected to have been blown into GB over the previous two weeks.	Negligible: No infectious BTV-infected midges are expected to have been blown into GB over the previous two weeks.
Vector activity in high-risk area of source country	Thought to have been active and feeding in source country over the last two weeks.	Thought to have been active and feeding in source country over the last two weeks.	Thought to have been active and feeding in source country over the last two weeks.	Thought to have been active and feeding in source country over the last two weeks.	Thought to have been active and feeding in source country over the last two weeks.
Temperatures in high-risk area of source country this season	Temperatures in the high-risk area of the source country are known to have been high enough for vectors infected with BTV this season to become infectious.	Temperatures in the high-risk area of the source country are known to have been high enough for vectors infected with BTV this season to become infectious.	Temperatures in the high-risk area of the source country are known to have been high enough for vectors infected with BTV this season to become infectious.	Temperatures in the high-risk area of the source country are not thought to have been high enough for vectors infected with BTV this season to become infectious.	Temperatures in the high-risk area of the source country are not thought to have been high enough for vectors infected with BTV this season to become infectious.
Temperatures in high-risk area of source country over last two weeks	Temperatures in the high-risk area of the source country over the last two weeks may have been suitable for vectors infected with BTV to become infectious.	Temperatures in the high-risk area of the source country over the last two weeks may have been suitable for vectors infected with BTV to become infectious.	Temperatures in the high-risk area of the source country over the last two weeks may have been suitable for vectors infected with BTV to become infectious.	Temperatures in the high-risk area of the source country over the last two weeks are not expected to have been suitable for vectors infected with BTV to become infectious.	Temperatures in the high-risk area of the source country over the last two weeks are not expected to have been suitable for vectors infected with BTV to become infectious.

BTV epidemiological situation in livestock in high-risk area of source country	BTV has not been reported in livestock in or near the high-risk area of the source country over the last two weeks, but reporting is incomplete.	BTV has not been reported in livestock in or near the high-risk area of the source country over the last two weeks, but reporting is incomplete.	BTV has not been reported in livestock in or near the high-risk area of the source country over the last two weeks, but reporting is incomplete.	BTV has been reported in livestock in or near the high-risk area of the source country over the last two weeks.	BTV has been reported in livestock in or near the high-risk area of the source country over the last two weeks.

Uncertainty in the country-specific risk of airborne incursion of BTV-infectious vectors

	France	**Belgium**	**Netherlands**	**Germany**	**Denmark**
Uncertainty in BTV incursion risk estimate	Moderate: Some information or data are lacking or incomplete. Subjective judgement is introduced with supporting evidence.	Moderate: Some information or data are lacking or incomplete. Subjective judgement is introduced with supporting evidence.	Low: Most/ all information or data are complete. No subjective judgement is introduced.	Low: Most/ all information or data are complete. No subjective judgement is introduced.	Low: Most/ all information or data are complete. No subjective judgement is introduced.
Knowledge of current livestock BTV infection in high-risk area of source country	New cases recently reported, but unclear whether recent or historical infections. Exact temperature requirements for BTV spread unknown (but temperatures in high-risk area may be too low for sustained and onward virus transmission). Level of surveillance activities unknown. Virus overwintering processes unclear.	No new reports of BTV infection in the country due to lack of updates. Exact temperature requirements for BTV spread unknown (but temperatures in high-risk area may be too low for sustained and onward virus transmission). Level of surveillance activities unknown. Virus overwintering processes unclear.	No new reports of recent BTV infection in the country due to lack of updates. Exact temperature requirements for BTV spread unknown (but temperatures in high-risk area may be too low for sustained and onward virus transmission). Unclear whether historical cases still being reported. Level of surveillance activities unknown. Virus overwintering processes unclear.	New cases recently reported, but likely to be historical infections in high-risk area. Exact temperature requirements for BTV spread unknown (but suspect temperatures in high-risk area remain too low for sustained and onward virus transmission). Level of surveillance activities unknown. Virus overwintering processes unclear.	New cases recently reported, but likely to be historical infections. Exact temperature requirements for BTV spread unknown (but suspect temperatures in high-risk area remain too low for sustained and onward virus transmission). Level of surveillance activities unknown. Virus overwintering processes unclear.
Knowledge of current livestock	Current level of immunity unknown.	Current level of immunity unknown.	Current level of immunity unknown.	Current level of immunity unknown.	Current level of immunity unknown.

immunity to BTV in the source country	Some immunity to BTV-8 and BTV-3 expected due to natural infection and vaccination. No expected immunity to BTV-12. Voluntary BTV-3 vaccination implemented in the country last year. New vaccine strategy planned for summer 2025. Vaccine coverage and efficacy is unknown.	Some immunity to BTV-8 and BTV-3 expected due to natural infection and vaccination. No expected immunity to BTV-12. Mandatory BTV-3 and BTV-8 vaccination for all cattle and sheep in the country before turn-out to pasture. Vaccine coverage and efficacy is unknown.	Some immunity to BTV-8 and BTV-3 expected due to natural infection and vaccination. Limited expected immunity to BTV-12. Voluntary BTV-3 vaccination implemented in the country last year, and still in place. Vaccine coverage and efficacy is unknown.	Some immunity to BTV-8 and BTV-3 expected due to natural infection and vaccination. No expected immunity to BTV-12. Voluntary BTV-3 vaccination implemented in the country last year, and still in place. Vaccine coverage and efficacy is unknown.	Some immunity to BTV-8 and BTV-3 expected due to natural infection and vaccination. No expected immunity to BTV-12. Voluntary BTV-3 vaccination implemented in the country last year, and still in place. Vaccine coverage and efficacy is unknown.
Knowledge of current vector infection with BTV in high-risk area of source country	No known surveillance for infection in vectors. Exact temperature requirements for replication of current BTV strains unknown (but temperatures in high-risk area may be too low for rapid development of infectiousness in vectors). Uncertainty in livestock infection status (and therefore risk of vector infection) in the high-risk area. Virus overwintering processes unclear.	No known surveillance for infection in vectors. Exact temperature requirements for replication of current BTV strains unknown (but temperatures in high-risk area may be too low for rapid development of infectiousness in vectors). Uncertainty in livestock infection status (and therefore risk of vector infection) in the high-risk area. Virus overwintering processes unclear.	No known surveillance for infection in vectors. Exact temperature requirements for replication of current BTV strains unknown (but temperatures in high-risk area may be too low for rapid development of infectiousness in vectors). Uncertainty in livestock infection status (and therefore risk of vector infection) in the high-risk area. Virus overwintering processes unclear.	No known surveillance for infection in vectors. Exact temperature requirements for replication of current BTV strains unknown (but suspect temperatures in high-risk area remain too low for rapid development of infectiousness in vectors). Uncertainty in livestock infection status (and therefore risk of vector infection) in the high-risk area. Virus overwintering processes unclear.	No known surveillance for infection in vectors. Exact temperature requirements for replication of current BTV strains unknown (but suspect temperatures in high-risk area remain too low for rapid development of infectiousness in vectors). Uncertainty in livestock infection status (and therefore risk of vector infection) in the high-risk area. Virus overwintering processes unclear.
Other comments on BTV risk uncertainty	None.	None.	Uncertainty estimate constrained by lack of potential vector incursions.	Uncertainty estimate constrained by lack of potential vector incursions	Uncertainty estimate constrained by lack of potential vector incursions

				and limited potential for vector infection.	and limited potential for vector infection.

3. Risk of airborne EHDV incursion into GB from high-risk countries on the Continent (risk of incursion of infectious midge vectors)

Country-specific risk of airborne incursion of EHDV-infectious vectors

	France	Belgium	Netherlands	Germany	Denmark
Risk of incursion of infectious EHDV--infected- vectors into GB from source country	Negligible: No infectious EHDV-infected midges are expected to have been blown into GB over the previous two weeks.	Negligible: No infectious EHDV-infected midges are expected to have been blown into GB over the previous two weeks.	Negligible: No infectious EHDV-infected midges are expected to have been blown into GB over the previous two weeks.	Negligible: No infectious EHDV-infected midges are expected to have been blown into GB over the previous two weeks.	Negligible: No infectious EHDV-infected midges are expected to have been blown into GB over the previous two weeks.
Vector activity in high-risk area of source country	Thought to be active and feeding in source country.	Thought to be active and feeding in source country.	Thought to be active and feeding in source country.	Thought to be active and feeding in source country.	Thought to be active and feeding in source country.
Note on temperature summaries below	Estimates below relate to BTV rather than EHDV due to limited knowledge of EHDV temperature requirements. It is considered likely that EHDV temperature requirements are higher than for BTV.	Estimates below relate to BTV rather than EHDV due to limited knowledge of EHDV temperature requirements. It is considered likely that EHDV temperature requirements are higher than for BTV.	Estimates below relate to BTV rather than EHDV due to limited knowledge of EHDV temperature requirements. It is considered likely that EHDV temperature requirements are higher than for BTV.	Estimates below relate to BTV rather than EHDV due to limited knowledge of EHDV temperature requirements. It is considered likely that EHDV temperature requirements are higher than for BTV.	These estimates relate to BTV rather than EHDV due to limited knowledge of EHDV temperature requirements. It is considered likely that EHDV temperature requirements are higher than for BTV.
Temperatures in high-risk area of source country this season	Temperatures in the high-risk area of the source country are known to have been high enough for vectors infected with BTV this season to become infectious.	Temperatures in the high-risk area of the source country are known to have been high enough for vectors infected with BTV this season to become infectious.	Temperatures in the high-risk area of the source country are known to have been high enough for vectors infected with BTV this season to become infectious.	Temperatures in the high-risk area of the source country are not thought to have been high enough for vectors infected with BTV this season to become infectious.	Temperatures in the high-risk area of the source country are not thought to have been high enough for vectors infected with BTV this season to become infectious.

Temperatures in high-risk area of source country over last two weeks	Temperatures in the high-risk area of the source country over the last two weeks may have been suitable for vectors infected with BTV to become infectious.	Temperatures in the high-risk area of the source country over the last two weeks may have been suitable for vectors infected with BTV to become infectious.	Temperatures in the high-risk area of the source country over the last two weeks may have been suitable for vectors infected with BTV to become infectious.	Temperatures in the high-risk area of the source country over the last two weeks are not expected to have been suitable for vectors infected with BTV to become infectious.	Temperatures in the high-risk area of the source country over the last two weeks are not expected to have been suitable for vectors infected with BTV to become infectious.
EHDV epidemiological situation in livestock in high-risk area of source country	EHDV has not been reported in livestock in or near the high-risk area of the source country over the last two weeks and reporting is reliable.	EHDV has not been reported in livestock in or near the high-risk area of the source country over the last two weeks and reporting is reliable.	EHDV has not been reported in livestock in or near the high-risk area of the source country over the last two weeks and reporting is reliable.	EHDV has not been reported in livestock in or near the high-risk area of the source country over the last two weeks and reporting is reliable.	EHDV has not been reported in livestock in or near the high-risk area of the source country over the last two weeks and reporting is reliable.

Uncertainty in the country-specific risk of airborne incursion of EHDV-infectious vectors

	France	**Belgium**	**Netherlands**	**Germany**	**Denmark**
Uncertainty in EHDV incursion risk estimate	Low: Relevant knowledge good and most/ all data are complete. No subjective judgement is introduced.	Low: Relevant knowledge good and most/ all data are complete. No subjective judgement is introduced.	Low: Relevant knowledge good and most/ all data are complete. No subjective judgement is introduced.	Low: Relevant knowledge good and most/ all data are complete. No subjective judgement is introduced.	Low: Relevant knowledge good and most/ all data are complete. No subjective judgement is introduced.
Knowledge of current livestock EHDV infection in high-risk area of source country	Infection was reported last season near to the high-risk area (but not inside). New cases recently reported, but unclear whether recent or historical infections. Exact temperature requirements for EHDV spread unknown (but suspect temperatures in high-risk area remain too	Report of a single positive cow (over 50km from border of high-risk area) in late April. Suspected to be vaccinated animal imported from France. Exact temperature requirements for EHDV spread unknown (but suspect temperatures in high-risk area remain too	No reports and no suspicion of virus presence in country.	No reports and no suspicion of virus presence in country.	No reports and no suspicion of virus presence in country.

	low for sustained and onward virus transmission). Level of surveillance activities unknown.	low for sustained and onward virus transmission).			
Knowledge of current livestock immunity to EHDV in the source country	Current level of immunity unknown. Some immunity to EHDV expected due to natural infection and vaccination. EHDV vaccination implemented in the country last year to prevent spread and facilitate trade. Vaccine coverage or efficacy remains unclear.	Mandatory EHDV vaccination for all cattle and sheep in the country before turn-out to pasture. Vaccine coverage or efficacy remains unclear.	No immunity to EHDV expected as no natural spread or vaccination.	No immunity to EHDV expected as no natural spread or vaccination.	No immunity to EHDV expected as no natural spread or vaccination.
Knowledge of current vector infection with EHDV in high-risk area of source country	Exact temperature requirements for replication of current EHDV strains unknown (but suspect temperatures in high-risk area remain too low for rapid development of infectiousness in vectors). Uncertainty in livestock infection status in the high-risk area.	Exact temperature requirements for replication of current EHDV strains unknown (but suspect temperatures in high-risk area remain too low for rapid development of infectiousness in vectors).	No reports and no suspicion of virus presence in country.	No reports and no suspicion of virus presence in country.	No reports and no suspicion of virus presence in country.
Other comments on EHDV risk uncertainty	None.	None.	None.	None.	None.

4. BTV spread risk within GB.

High risk region	Counties in region	Estimated number of cattle in region	Estimated number of sheep in region	Vector feeding levels	Temperature suitability for virus spread
South West	Cornwall Devon Dorset Somerset Wiltshire	1,533,622	1,540,170	Vectors are known to have been feeding on livestock over the last two weeks.	Very Low: Temperatures in the high risk region of GB were very unlikely to have been suitable for BTV transmission by vectors over the previous two weeks.
South East	Hampshire Isle of Wight East Sussex West Sussex Kent	204,573	434,680	Vectors are known to have been feeding on livestock over the last two weeks.	Low: Temperatures in the high risk region of GB were unlikely to have been suitable for BTV transmission by vectors over the previous two weeks.
East Anglia	Essex Suffolk Norfolk	133,490	145,925	Vectors are known to have been feeding on livestock over the last two weeks.	Low: Temperatures in the high risk region of GB were unlikely to have been suitable for BTV transmission by vectors over the previous two weeks.
North East	Lincolnshire East Riding of Yorkshire North Yorkshire Durham Tyne & Wear Northumberland	764,208	2,044,607	Vectors are known to have been feeding on livestock over the last two weeks.	Very Low: Temperatures in the high risk region of GB were very unlikely to have been suitable for BTV transmission by vectors over the previous two weeks.

Estimates of numbers of cattle and sheep in the different regions as shown in the table above are taken from recent LDDG reports:

- Livestock Demographic Data Group: Cattle population report 2023
- Livestock Demographic Data Group: Sheep population report 2023

Appendix A: Risk and uncertainty levels used in the assessment.

Risk level	Probability range	Likelihood statement
Negligible	Less than 1 in 1 million	So rare that it does not merit to be considered
Very Low	Between 1 in one million and 1 in one thousand	Very unlikely but cannot be excluded
Low	Between 1 in one thousand and 0.05	Unlikely but could occur
Medium	Between 0.05 and 0.50	Likely
High	Between 0.50 and 0.90	Very likely but not certain
Very High	Over 0.90	Almost certain

Uncertainty level	Explanation
Low	Knowledge of the relevant processes is considered good and most/ all information or data are complete. No subjective judgement is introduced.
Moderate	There is a lack of knowledge of the relevant processes and/ or some information or data are lacking or incomplete. Subjective/ expert judgement is introduced with supporting evidence.
High	There is a lack of knowledge of the relevant processes and/ or most information or data are lacking or incomplete. Subjective/ expert judgement may be introduced without supporting evidence.

Appendix B: Modelling overview.

The Met Office Numerical Atmospheric-dispersion Modelling Environment (NAME) is run twice a day to estimate the likely transport of any infected midges.

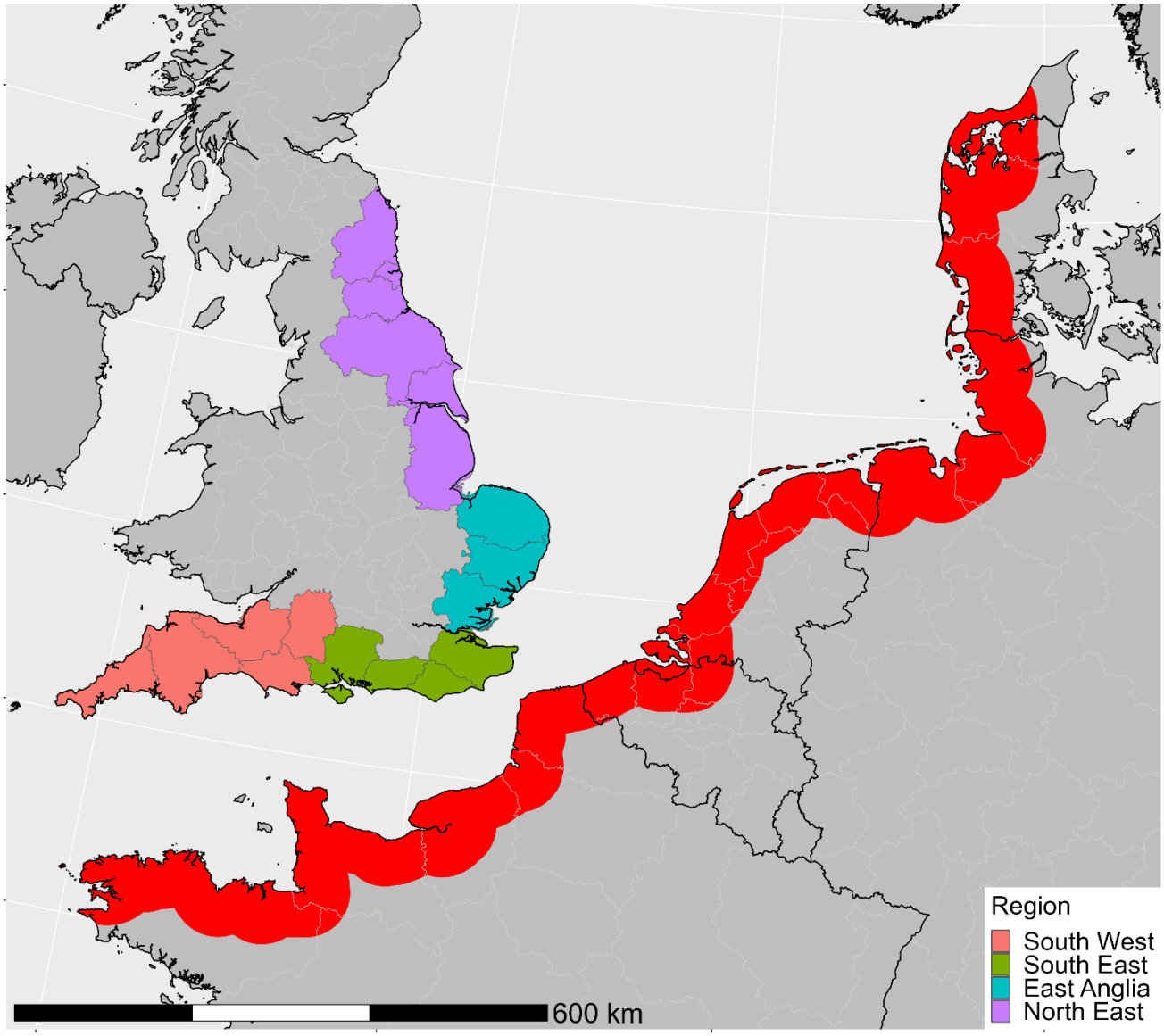
NAME is run using meteorological data from the Met Office's numerical weather prediction (NWP) model output with 1.5 km horizontal spatial resolution and hourly time resolution. Modelled particles are released over a 2-hour period at sunrise and over a 3-hour period at sunset to represent the diel periodicity of midge activity. The model particles are released from 10 m above ground level. This height is assumed to be above the normal flight boundary layer of midges, where wind speed is greater than midge flight speed, and therefore excludes midges undertaking active local-scale flight. Particles are then dispersed for 12 hours, reflecting wind-tunnel experiments on the flight duration of midges.

Particles are released from nine hypothetical source locations on the near Continent, located from north west France to western Denmark. These nine sites do not represent current observed locations of high midge activity or disease presence, but are used to give broad coverage of the coastline of the near Continent. The particles released are the NAME "midge" species, for which the particle release rate is a function of the day of the year and the local temperature, wind speed and precipitation at the source location. These midge species particles are also removed from the atmosphere either if they encounter rain rates in excess of 1 mm per hour, to represent the washout of midges, or if they pass over land any time after their first 2 hours of flight, to represent the small distances midges travel over land. The NAME midge species represents the most likely scenario for midges active on the Continent, as it takes into account the effects of seasonality and the meteorology on both take-off and survivability along the flight trajectory.

The resulting midge plumes do not represent the spread of disease, rather the spread of midges (which may or may not be infected) had they been present at the source location. The risk of airborne incursion from a particular source into mainland GB coastal counties and the Channel Islands is based upon the total number of incursions by midge plumes from that source over the previous two weeks.

Appendix C: High risk areas in Continental Europe and GB.

We consider the 50km wide area of continental Europe shown in red below to represent the area of main interest with regards to livestock infection and temperature suitability for onwards virus spread. The coloured areas in GB represent ceremonial counties at risk of airborne virus entry and/or potential subsequent onwards spread within GB, grouped into regions as described in the report. Note that although Somerset and Wiltshire are not coastal (and are therefore not considered counties of potential incursion), they are included as counties of interest for onwards spread within GB.



This image shows a map of GB and the adjacent portion of continental Europe. Within GB, four coastal and near-coastal regions in the south and east of England are indicated. These are named as follows (and composed of the listed ceremonial counties): the South West (Cornwall, Devon, Somerset, Dorset, Wiltshire), South East (Hampshire, Isle of Wight, West Sussex, East Sussex, Kent), East Anglia (Essex, Suffolk, Norfolk), and the North East (Lincolnshire, East Riding of Yorkshire, North Yorkshire, Durham, Tyne & Wear, Northumberland). Within continental Europe, a 50km band along the coast adjacent to GB is indicated in red. This runs from western France (Brittany), through north and northwestern Belgium, Netherlands, and Germany, through western Denmark to the north of the Jutland peninsula.