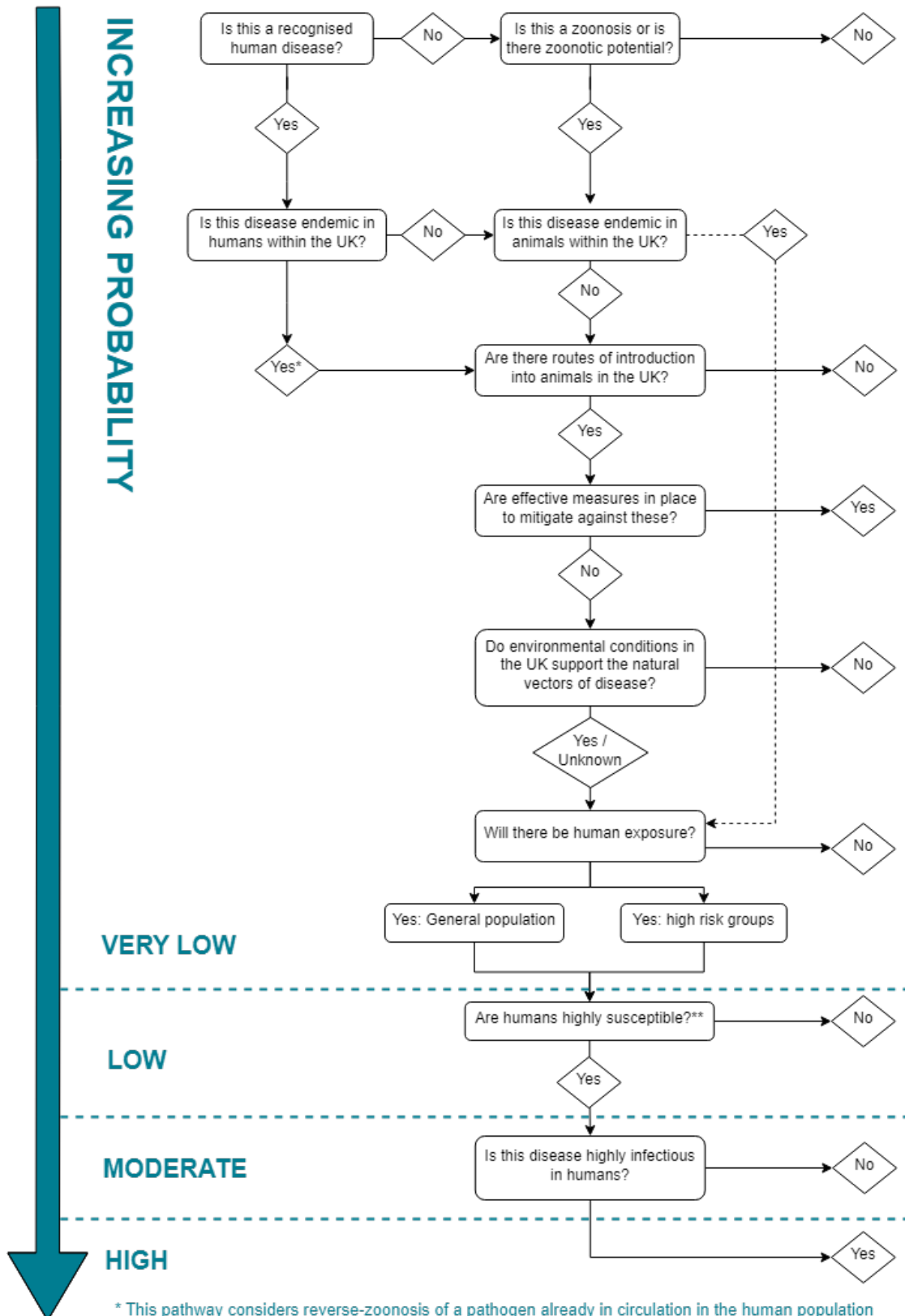


Appendix D. Emerging infection algorithm

Probability algorithm



Accessible text version for Appendix D: Emerging infection probability algorithm:

Question 1: Is this a recognised human disease?

Yes: go to question 3.

No: go to question 2.

Question 2: Is this a zoonosis or is there a zoonotic potential?

Yes: go to question 4.

No: the probability of infection in the UK population is considered very low.

Question 3: Is this disease endemic in humans within the UK?

Yes*: go to question 5.

No: go to question 4.

*This pathway considers reverse-zoonosis of a pathogen already in circulation in the human population.

Question 4: Is this disease endemic in animals in the UK?

Yes: go to question 8.

No: go to question 5.

Question 5: Are there routes of introduction into animals in the UK?

Yes: go to question 6.

No: the probability of infection in the UK population is considered very low.

Question 6: Are effective measures in place to mitigate against these?

Yes: the probability of infection in the UK population is considered very low.

No: go to question 7.

Question 7: Do environmental conditions in the UK support the natural vectors of disease?

Yes or unknown: go to question 8.

No: the probability of infection in the UK population is considered very low.

Question 8: Will there be human exposure?

Yes (general population and/or high risk groups): go to question 9.

No: the probability of infection in the UK population is considered very low.

Question 9: Are humans highly susceptible?*

Yes: go to question 10.

No: the probability of infection in the UK population is considered low.

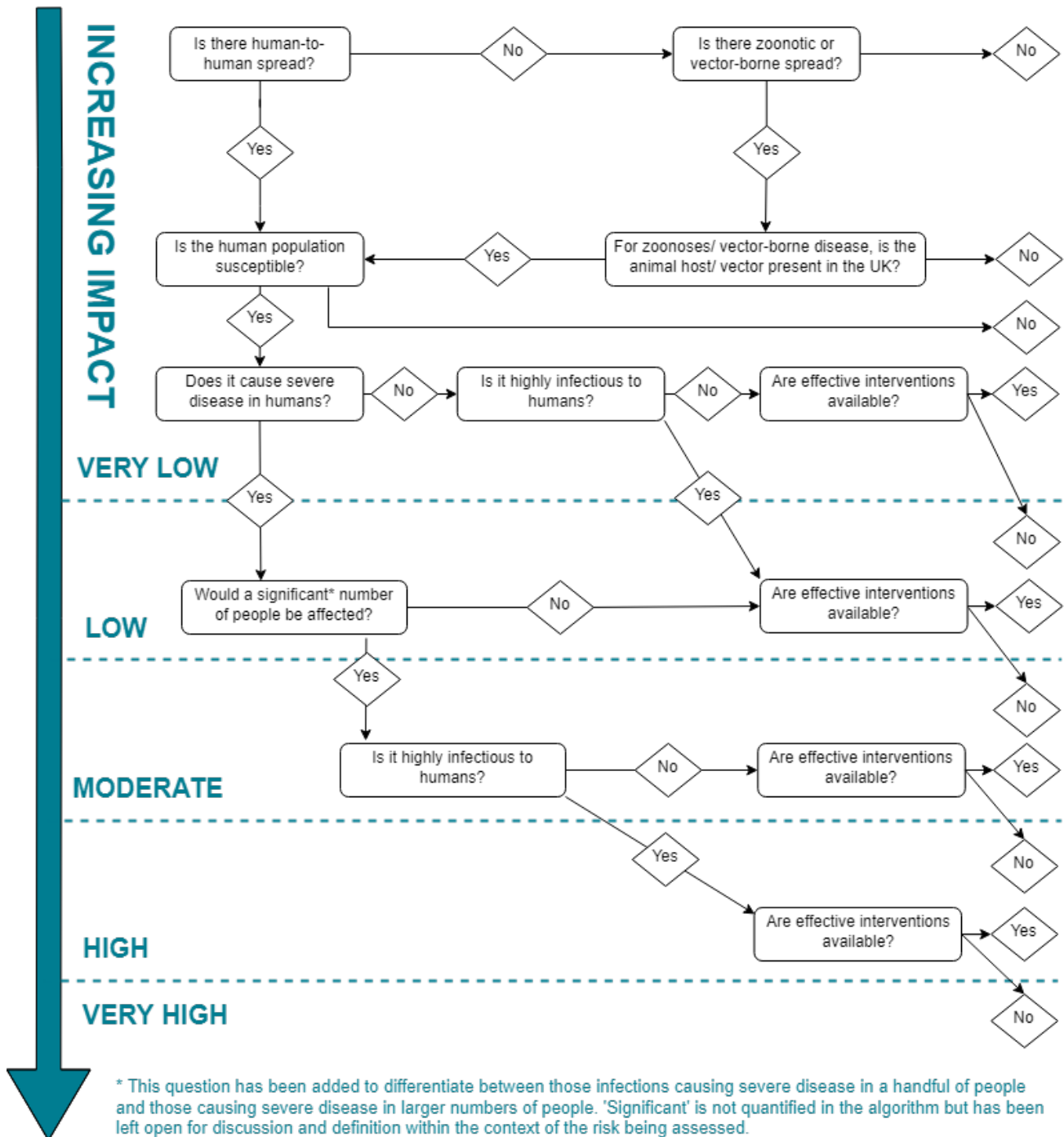
** Includes susceptibility to animal-derived variants

Question 10: Is the disease highly infectious in humans?

Yes: the probability of infection in the UK population is considered high.

No. the probability of infection in the UK population is considered moderate.

Impact algorithm



Accessible text version of Appendix D: Emerging infection impact algorithm:

Question 1: Is there human-to-human spread?

Yes: go to question 4.

No: go to question 2.

Question 2: Is there zoonotic or vector-borne spread?

Yes: go to question 3.

No: the impact of infection in the UK population is considered very low.

Question 3: For zoonoses or vector-borne disease, is the animal host or vector present in the UK?

Yes: go to question 4.

No: the impact of infection in the UK population is considered very low.

Question 4: Is the human population susceptible?

Yes: go to question 5.

No: the impact of infection in the UK population is considered very low.

Question 5: Does it cause severe disease in humans?

Yes: go to question 8.

No: go to question 6.

Question 6: Is it highly infectious to humans?

Yes: go to question 9.

No: Go to question 7.

Question 7: Are effective interventions available?

Yes: the impact of infection in the UK population is considered very low.

No: the impact of infection in the UK population is considered low.

Question 8: Would a significant* number of people be affected?

Yes: go to question 10.

No: go to question 9.

*This question has been added to differentiate between those infections causing severe disease in a handful of people and those causing severe disease in larger numbers of people. 'Significant' is not quantified in the algorithm but has been left open for discussion and definition within the context of the risk being assessed.

Question 9: Are effective interventions available?

Yes: the impact of infection in the UK population is considered low.

No: the impact of infection in the UK population is considered moderate.

Question 10: Is it highly infectious to humans?

Yes: go to question 12.

No: go to question 11.

Question 11: Are effective interventions available?

Yes: the impact of infection in the UK population is considered moderate.

No: the impact of infection in the UK population is considered high.

Question 12: Are effective interventions available?

Yes: the impact of infection in the UK population is considered high.

No: the impact of infection in the UK population is considered very high.