Methods The analysis is based upon structured interviews conducted on a multi-district sample of 240 retailers/service providers and around 1500 households across UP. The data collected is then triangulated with other sources of data available for UP, collected within the reference period of 2008–2010. The location of retailers and service providers were then mapped to analyse the geographic spread and thus accessibility. This data are also supplemented with qualitative assessment of existing practices related to management of childhood diarrhoea.

Results and Conclusion Triangulation of data suggests that the following bottlenecks contribute to low ORS/Zinc use:

- Low awareness and perceived efficacy of ORS and Zinc for management of childhood diarrhoea both among service providers and end-users
- Erratic availability of ORS and Zinc in public-health facilities
- Geographic clustering of retailers/sources of ORS and Zinc
- Financial constraints of beneficiaries

Conclusion Without significant global greenhouse gas reduction, there could be an eightfold increase in the number of people living in dengue-prone regions in Australia by the end of the century. Similar impacts will be experienced elsewhere and for other vector-borne diseases, with regions currently on the margins of transmission zones most affected. Globally, climate change is likely to compound existing problems of blood safety and supply in already endemic areas and cause future shortages in fresh blood products through its impact on transmission of vector-borne disease.

P2-364 CLIMATE CHANGE THREATENS BLOOD SUPPLY THROUGH ALTERING THE DISTRIBUTION OF VECTOR-BORNE DISEASE: AN AUSTRALIAN CASE-STUDY

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Introduction Climate change is expected to promote more intense and prolonged outbreaks of vector-borne disease, and alter the geographic boundaries of transmission. This has implications for the safety and supply of fresh blood products around the world. In Australia, a recent outbreak of dengue fever caused a prolonged regional shortage in the supply of fresh blood products. Climate change thus has the potential to affect the safety and supply of blood globally through its impact on vector-borne disease. We demonstrate this using the example of dengue in Australia.

Methods Using four climate change scenarios we modelled geographic regions in Australia suitable for dengue transmission and the number of people living in transmission zones, and estimated the effect of future outbreaks on blood supply.

Results Geographic regions with climates that are favourable to dengue transmission could expand to include large population centres in a number of currently dengue-free regions in Australia and reduce blood supply across several states.

Conclusion Without significant global greenhouse gas reduction, there could be an eightfold increase in the number of people living in dengue-prone regions in Australia by the end of the century. Similar impacts will be experienced elsewhere and for other vector-borne diseases, with regions currently on the margins of transmission zones most affected. Globally, climate change is likely to compound existing problems of blood safety and supply in already endemic areas and cause future shortages in fresh blood products through its impact on transmission of vector-borne disease.