Preparedness for flooding, an increasing necessity in a changing climate with one health consequence

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As global warming goes on we have seen a lot of extraordinary weather situations in all parts of the world. Flooding over rural areas is one of several events with a great impact on both agriculture and on society as a whole. The preparedness for flooding ranges from flood mapping, embankment and reserving areas as flood plains to maintaining rescue resources on farm, local, regional and national levels. Flooding can happen along rivers and lakes but also almost anywhere after heavy downpours. After flood events the most obvious risks for infection from a zoonotic point of view are the parasite Cryptosporidium and bacteria as Salmonella, VTEC/EHEC and to a certain extent Bac. Anthracis. Cryptosporidium have several pathogenic species. C. hominis is just pathogenic for people whereas C. parvum infects young bovine calves and has also zoonotic capabilities. Salmonella can spread through water and also remain on a flooded pasture after the water has withdrawn. When animals come to graze perhaps months later they can be infected and spread the disease to other animals and humans although the infective dose is quite high. VTEC/EHEC, the strains of E. Coli that produce toxins that sometimes cause serious disease to people, has also proved in Sweden to be able to contaminate cultured lettuce through irrigation. Bacillus Anthracis has ability to spread through water and tend to float long distances on the surface without being diluted. The disease Anthrax is not easily transmitted to humans but is of course a potentially severe zoonotic disease. Although the possibilities for diseases exist, there are mostly other consequences of floods that are more important from a health point of view.