Modelling preparation and consumption of pork products

Swart, A.N.*
Nauta, M., Evers, Hald, T., Snary, E.I.

RIVM (National Institute For Public Health and the Environment), Bilthoven, The Netherlands.

* RIVM / Centre for Infectious Disease Control - CIb / Laboratory for Zoonoses and Environmental Microbiology-LZO, P.O. Box 1 (internal mailbox 63), 3720 BA, Bilthoven, The Netherlands
email: arno.swart@rivm.nl; fax: +31(0)30-2744434

Abstract
This poster describes the retail and consumer phase of the EFSA Salmonella in Pork Quantitative Microbiological Risk Assessment (QMRA), which was funded under an Article 36 grant to support the scientific opinion required by the EC from the European Food Safety Authority (EFSA) and adopted by the BIOHAZ panel.
The food chain is modelled from retail to ingestion by the consumer. Three types of pork are considered: minced meat, pork cuts and dry cured sausages. This particular choice was made because each product represents a clear distinct hazard. Pork cuts are usually cooked well, but there is a chance of cross contamination during cutting and handling of the meat. Minced meat is thoroughly mixed, and Salmonellae may be present in the interior of hamburger patties, undercooking may occur, and Salmonellae may survive. Dry cured sausages, including all variations therein like chorizo, salami, etc., are eaten uncooked.
Food preparation habits are highly variable and accurate data on daily life food handling practices are hard to obtain. We performed a literature survey and parametrised the model including the inherent variability in consumer behaviour. The output is the number of Salmonellae ingested per person per day, for each pig meat product. This output will be fed into the final model, where the risk of illness is modelled using a dose-response relation.