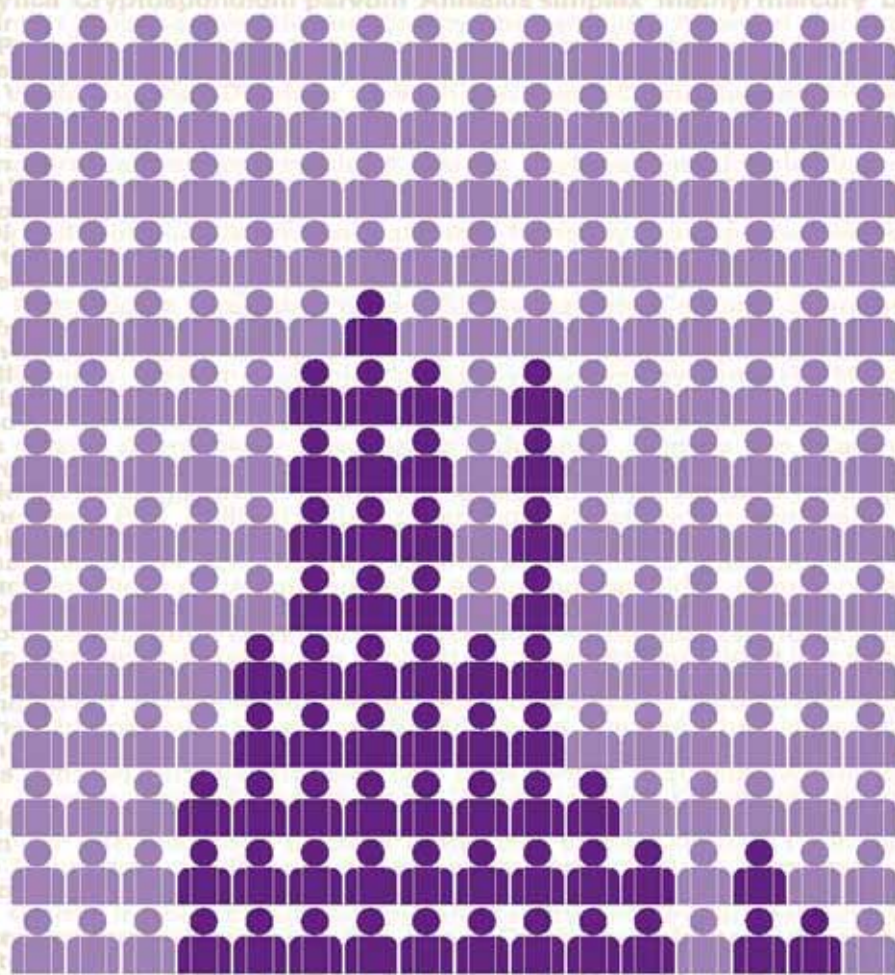


# FOODBORNE DISEASE OUTBREAKS

## Guidelines for Investigation and Control



World Health  
Organization

# Foodborne disease outbreaks: Guidelines for investigation and control





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# Contents

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<b>Acknowledgements</b>	<b>iii</b>
<b>Foreword</b>	<b>v</b>
<b>Introduction</b>	<b>1</b>
Section 1. <b>Practical guide</b>	<b>2</b>
Section 2. <b>Planning and preparation</b>	<b>4</b>
2.1 General	<b>4</b>
2.2 Outbreak control team	<b>4</b>
2.3 Record keeping	<b>6</b>
2.4 Communication	<b>6</b>
Section 3. <b>Surveillance to detect foodborne disease outbreaks</b>	<b>9</b>
3.1 Introduction	<b>9</b>
3.2 Definitions	<b>9</b>
3.3 Data sources	<b>9</b>
3.4 Interpreting data sources	<b>12</b>
Section 4. <b>Investigation of foodborne disease outbreaks</b>	<b>14</b>
4.1 General	<b>14</b>
4.2 Epidemiological investigations	<b>14</b>
4.3 Environmental and food investigations	<b>36</b>
4.4 Laboratory investigations	<b>43</b>
Section 5. <b>Control measures</b>	<b>47</b>
5.1 General	<b>47</b>
5.2 Control of source	<b>47</b>
5.3 Control of transmission	<b>50</b>
5.4 End of outbreak	<b>52</b>
Section 6. <b>Features of important foodborne diseases</b>	<b>54</b>
6.1 Foodborne pathogens, toxins and chemicals of public health importance	<b>54</b>
6.2 Major foodborne pathogens: predominant clinical features	<b>56</b>
6.3 Major foodborne diseases: epidemiology and methods of control and prevention	<b>61</b>
<b>References</b>	<b>94</b>
<b>Further reading</b>	<b>96</b>
<b>Annexes</b>	
1. Glossary	<b>98</b>
2. Outbreak control meeting: draft agenda	<b>103</b>
3. Examples of outbreak investigation forms	<b>104</b>
4. Questionnaire design	<b>107</b>
5. Sample questionnaires	<b>109</b>
6. Investigation report forms	<b>114</b>
7. Statistics	<b>127</b>
8. Situations likely to contribute to foodborne disease outbreaks	<b>132</b>
9. Procedures and equipment for specimen collection	<b>139</b>
10. The WHO Five Keys to Safer Food	<b>146</b>



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## Foreword

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Acute diarrhoeal illness is very common worldwide and estimated to account for 1.8 million childhood deaths annually, predominantly in developing countries (World Health Organization, 2005). The burden of diarrhoeal illness is substantial in developed countries as well (Scallan et al., 2005). Estimates of the burden of foodborne diseases are complicated by a number of factors: different definitions of acute diarrhoeal illness are used in various studies, most diarrhoeal illness is not reported to public health authorities, and few illnesses can be definitively linked to food. While not all gastroenteritis is foodborne, and not all foodborne diseases cause gastroenteritis, food does represent an important vehicle for pathogens of substantial public health significance. A number of studies are under way that aim to provide a better understanding of the global public health burden of gastroenteritis and foodborne diseases (Flint et al., 2005).

There are many reasons for foodborne disease remaining a global public health challenge. As some diseases are controlled, others emerge as new threats. The proportions of the population who are elderly, immunosuppressed or otherwise disproportionately susceptible to severe outcomes from foodborne diseases are growing in many countries. Globalization of the food supply has led to the rapid and widespread international distribution of foods. Pathogens can be inadvertently introduced into new geographical areas, such as with the discharge of ballast water contaminated with *Vibrio cholerae* in the Americas in 1991. Travellers, refugees and immigrants may be exposed to unfamiliar foodborne hazards in new environments. Changes in microorganisms lead to the constant evolution of new pathogens, development of antibiotic resistance, and changes in virulence of known pathogens. In many countries, as people increasingly consume food prepared outside the home, growing numbers are potentially exposed to the risks of poor hygiene in commercial foodservice settings.

All of these emerging challenges require that public health workers continue to adapt to a changing environment with improved methods to combat these threats.

Too often, outbreaks of foodborne disease go unrecognized or unreported or are not investigated. Many resources are available for the investigation of foodborne disease outbreaks, but few are directed at developing countries. These guidelines are intended to serve as a general introduction to the identification and investigation of foodborne disease outbreaks in a variety of settings. Numerous other resources are available for additional, more detailed, information on surveillance, epidemiology, statistical analyses and the medical aspects of foodborne diseases. It is important to remember that no general guidelines will fit a

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