

PAS 320:2023

Developing and sustaining a mature food safety culture – Guide



Publishing and copyright information

The BSI copyright notice displayed in this document indicates when the document was last issued.

© The British Standards Institution 2023.

Published by BSI Standards Limited 2023.

ISBN 978 0 539 26345 9

ICS 67.040; 67.230

No copying without BSI permission except as permitted by copyright law.

Publication history

First published April 2023

Contents

Foreword	ii
Introduction	iv
1 Scope	1
2 Normative references	2
3 Terms, definitions and abbreviated terms	3
4 Understanding the fundamentals of a food safety culture and the context of the organization.....	6
5 Establishing the governance for a food safety culture	8
6 Understanding the organization's food safety culture	12
7 Designing a strategic change plan to achieve the desired food safety culture	14
8 Preparing the key functions towards a food safety culture	17
9 Embedding the change plan of the organization's food safety culture into the existing FSMS	20
10 Evaluating the performance of the organization's food safety culture	21
11 Sustaining the continual improvement of the organization's food safety culture	23
Annexes	
Annex A (informative)	
Summary of actions from the main clauses in PAS 320.....	24
Annex B (informative)	
Information to be communicated internally within the organization.....	26
Bibliography	27
List of figures	
Figure 1 – Framework for a process to mature and sustain the continual improvement of the organization's food safety culture	7
Figure 2 – Structured example of the progressive nature of the maturity levels of the organization's food safety culture.....	13
Figure A.1 – Overview of the relationship of the clauses in PAS 320.....	24

Foreword

The development of this PAS was facilitated by BSI Standards Limited and it was published under licence from The British Standards Institution. It came into effect on 30 April 2023.

Acknowledgement is given to the following organizations that funded this PAS:

- Campden BRI
- Dairy Food Safety Victoria
- Dairy Farmers America
- Eagle Certification
- Food Design Consultants Group
- Intertek Alchemy
- Jiangxi Institute of Standardization
- Kerry Group
- Musgraves
- Neogen®
- One Harvest
- SSAFE
- Walmart
- Zhejiang Institute of Standardization
- Zhejiang ShouxianGu Pharmaceutical Co., Ltd.

Acknowledgement is given to Ana Cicolin, as the Technical Author of this PAS. Further acknowledgement is given to Dr Lone Jespersen as the Technical Author of the initial draft document produced during the development of this PAS. The following organizations were involved in the development of this PAS as members of the Steering Group:

- BRCGS
- BSI Food & Retail Sector
- Campden BRI
- Compass Group
- Dairy Farmers of America
- Dairy Food Safety Victoria
- Danone
- Eagle Certification
- Hello Fresh
- Institute of Food Science and Technology (IFST)
- Intertek Alchemy
- Kerry Group
- KFC UK and Ireland

- Maple Leaf Foods
- McDonald's
- Musgraves
- Neogen®
- One Harvest
- OSI Group
- PepsiCo
- SSAFE
- Sunny Queen Australia
- UKAS
- University of Lincoln
- Walmart
- Zhejiang Institute of Standardization
- Zhejiang ShouXianGu Botanical Drug Institute Co., Ltd

Acknowledgement is also given to the members of a wider review panel who were consulted in the development of this PAS.

The British Standards Institution retains ownership and copyright of this PAS. BSI Standards Limited, as the publisher of the PAS, reserves the right to withdraw or amend this PAS on receipt of authoritative advice that it is appropriate to do so. This PAS will be reviewed at intervals not exceeding two years.

This PAS is not to be regarded as a British Standard. It will be withdrawn in the event it is superseded by a British Standard.

The PAS process enables a standard to be rapidly developed in order to fulfil an immediate stakeholder need. A PAS can be considered for further development as a British Standard, or constitute part of the UK input into the development of a European or international standard.

Information about this document

This publication can be withdrawn, revised, partially superseded or superseded. Information regarding the status of this publication can be found in the Standards Catalogue on the BSI website at bsigroup.com/standards, or by contacting the Customer Services team.

Where websites and webpages have been cited, they are provided for ease of reference and are correct at the time of publication. The location of a webpage or website, or its contents, cannot be guaranteed.

Use of this document

As a guide, this PAS takes the form of guidance and advisory recommendations. It is not to be quoted as if it were a specification or a code of practice.

Presentational conventions

The guidance in this document is presented in roman (i.e. upright) type. Any recommendations are expressed in sentences in which the principal auxiliary verb is "should".

Additional commentary, explanation and general informative material is presented in smaller italic type.

Where words have alternative spellings, the preferred spelling of the *Shorter Oxford English Dictionary* is used (e.g. "organization" rather than "organisation").

Contractual and legal considerations

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

Compliance with a PAS cannot confer immunity from legal obligations.

In particular, attention is drawn to the following specific Act and regulations:

- EC Regulation No. 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs [1];
- FDA Food Safety Modernization Act (FSMA) [2]; and
- Codex Alimentarius, CXC 1-1969 [3].

Introduction

According to the World Health Organization (WHO) [4], consuming contaminated food resulted in an estimated 600 million people – almost 1 in 10 people in the world – falling ill, and leads to 420 000 deaths every year, resulting in the loss of 33 million healthy life years.

These data confirm that organizations ought not to operate in functional silos. Instead, organizations need to have teams collaboratively working toward shared values and goals to implement an effective food safety management system (FSMS) by adopting a process approach to existing practices to drive positive behaviours.

Management commitment is fundamental to build the foundation for a food safety culture as a catalyst for business improvement, sustain the continual improvement of the organization's food safety performance, and mature its food safety culture with the mindset that food safety is a whole food supply chain responsibility regardless of the organization's size or complexity. The WHO [4] stated that "food safety is a shared responsibility, and everyone has a role to play including governments, industry, producers, business operators and consumers".

PAS 320 provides a framework, using the plan-do-check-act (PDCA) methodology and process approach, to support organizations in developing, maturing and sustaining the continual improvement of their food safety culture. This approach can be used equally well by large and small organizations. The combination of the five dimensions of food safety culture (4.2) with the FSMS, management principles, and statutory, regulatory and customer requirements related to food safety is fundamental to supporting organizations on this journey.

As a first step, PAS 320 provides guidance on understanding the fundamentals of a food safety culture, including its definition, integration between its dimensions and the FSMS principles, its relationship to the wider organizational culture, and related internal and external issues.

Following a structured and clear understanding of the fundamentals of a food safety culture, the establishment of governance plays a vital role in maturing it and sustaining its continual improvement. PAS 320 includes recommendations related to leadership; the organization's vision, mission, values and policy; organizational structure; responsibilities, accountabilities and authorities; guiding coalition team; interested parties; change champions; influencers; and food safety documentation.

With the governance in place, the guiding coalition team is able to understand the current state of their organization's food safety culture and plan to develop, mature and sustain its continual improvement. To support this step, PAS 320 provides guidance on the definition of the desired food safety culture and the assessment and measurement of the current maturity level of organizations' food safety culture.

Annex A provides an overview of the relationship of the PAS 320 clauses and key actions from each clause.

PAS 320 provides recommendations to enable the design of a strategic change plan to achieve the desired food safety culture.

PAS 320 provides guidance on the establishment of a performance monitoring system to enable ongoing evaluation of organizations' food safety culture. PAS 320 includes recommendations on implementing an ongoing improvement cycle approach which supports increased food safety performance and brings other benefits to organizations including, but not limited to, talent retention, investment return, business performance improvement, reduction of the costs associated with poor quality, and enhanced efficiency.

1 Scope

This PAS gives guidance on how to mature, sustain and continually improve a food safety culture within an organization.

The PAS provides a framework for:

- a) understanding the fundamentals of a food safety culture;
- b) establishing the governance of a food safety culture;
- c) understanding the maturity level of the organization's food safety culture;
- d) designing a strategic change plan to achieve the desired food safety culture;
- e) preparing key functions towards the desired food safety culture;
- f) embedding the food safety culture change plan into the existing FSMS;
- g) evaluating the performance of the organization's food safety culture; and
- h) sustaining continual improvement of the organization's food safety culture.

This PAS is intended for use by any organization of any size or complexity across the food chain, from primary production to final delivery to consumers.

This PAS might be of use to educational institutions, trade associations, coalitions of action, professional bodies, certification bodies and other services providers, accreditation bodies, scheme owners and regulatory bodies.

The recommendations in this document are generic. The level of complexity of the food safety culture will depend upon each organization's context.

2 Normative references

There are no normative references in this document.

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1.1 antecedent

situation or event that precedes or triggers behaviour

3.1.2 continual improvement

recurring activity to enhance performance

[SOURCE: BS EN ISO 22000:2018, 3.7]

3.1.3 culture

integrated shared values, beliefs, history, ethics, attitudes and observed behaviours

NOTE Food safety culture is defined separately, see 3.1.6.

[SOURCE: BS ISO 10010:2022, 3.1, modified – note replaced]

3.1.4 food chain

sequence of stages in the production, processing, distribution, storage, handling and retail of a food and its ingredients, from primary production to consumption

NOTE 1 The term “food” also includes ingredients, beverages, feed and animal food.

NOTE 2 The food chain also includes the production of materials intended to come into contact with food or raw materials.

NOTE 3 The food chain also includes service providers.

[SOURCE: BS EN ISO 22000:2018, 3.20, modified – “retail” has been included, note 1 modified to include “ingredients” and “beverages”]

3.1.5 food safety

assurance that food will not cause an adverse health effect for the consumer when it is prepared and/or consumed in accordance with its intended use

NOTE Food safety is related to the occurrence of food safety hazards in end products and does not include other health aspects related to, for example, malnutrition.

[SOURCE: BS EN ISO 22000:2018, 3.21]

3.1.6 food safety culture

shared values, beliefs and norms that affect mindset and behaviour toward food safety in, across and throughout an organization

NOTE Culture is defined separately; see 3.1.3.

[SOURCE: GFSI, A culture of food safety – A position paper from the global food safety initiative [5], modified – note added]

3.1.7 food safety hazard

biological, chemical or physical agent in food with the potential to cause an adverse health effect

NOTE 1 The term “hazard” is not to be confused with the term “risk” which, in the context of food safety, means a function of the probability of an adverse health effect (e.g. becoming diseased) and the severity of that effect (e.g. death, hospitalization) when exposed to a specified hazard.

NOTE 2 Food safety hazards include allergens and radiological substances.

NOTE 3 In the context of feed and feed ingredients, relevant food safety hazards are those that can be present in and/or on feed and feed ingredients and that can through animal consumption of feed be transferred to food and can thus have the potential to cause an adverse health effect for the animal or the human consumer. In the context of operations other than those directly handling feed and food (e.g. producers of packaging materials, disinfectants), relevant food safety hazards are those hazards that can be directly or indirectly transferred to food when used as intended.

NOTE 4 In the context of animal food, relevant food safety hazards are those that are hazardous to the animal species for which the food is intended.

[SOURCE: BS EN ISO 22000:2018, 3.22]

3.1.8 food safety management system

set of interrelated or interacting elements of an organization to establish policies, objectives and processes to achieve food safety management system objectives

[SOURCE: BS ISO 22003-1:2022, 3.1, modified – note omitted]

3.1.9 governance

system by which the organization is directed, controlled and held accountable to achieve its core purpose over the long term

[SOURCE: BS 13500:2013, 2.7, modified – note omitted]

3.1.10 guiding coalition team

diverse group of individuals (leaders), empowered by top management, that work together to secure support for change from all interested parties and lead the implementation of a change plan to achieve the desired food safety culture and sustain its continual improvement

3.1.11 interested party

person or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity

[SOURCE: BS EN ISO 22000:2018, 3.23 and BS EN ISO 9000:2015, 3.2.3]

3.1.12 leadership

establishing unity of purpose and direction and creating conditions in which people are engaged in achieving the organizations' objectives

[SOURCE: BS EN ISO 9000:2015, 2.3.2.1, modified – "leaders at all levels" and "quality" omitted]

3.1.13 management

coordinated activities to direct and control an organization

[SOURCE: BS EN ISO 9000:2015, 3.3.3, modified – note omitted]

3.1.14 maturity model

self-assessment tool for assessing and measuring the performance of an organization and the degree of maturity of its management system, identifying areas for improvement and/or innovation and determining priorities for subsequent actions

[SOURCE: BS EN ISO 9004:2018, A.1 and A.2, modified – reworded from list items]

3.1.15 near miss

incident where no injury and ill health occurs, but that has the potential to cause an adverse health effect for the consumer when food is prepared and/or consumed in accordance with its intended use

3.1.16 nudge

positive reinforcement and/or indirect suggestions that alter people's behaviours and direct them towards positive behaviours without excluding choice

NOTE Examples include, but are not limited to:

- a) *altering the behaviour of a group to maintain social distancing by adding floor markings;*
- b) *discouraging team members from coming to work sick by sharing how others are put at risk by their sickness;*
- c) *flies embossed into the urinals at Schiphol airport, which have reduced spillage and bathroom cleaning costs.*

3.1.17 organizational culture

values, beliefs and practices that influence the conduct and behaviour of people and organizations

[SOURCE: BS ISO 30400:2022, 3.1.3]

3.1.18 process approach

systematic definition and management of processes, and their interactions, so as to achieve the intended results in accordance with the food safety policy and strategic direction of the organization

[SOURCE: BS EN ISO 22000:2018, 0.3.1]

3.1.19 scheme owner

person or organization responsible for the development and maintenance of a conformity assessment system or conformity assessment scheme

[SOURCE: BS EN ISO/IEC 17000:2020, 4.13, modified – conformity assessment repeated for clarity]

3.1.20 social norm

common standards within a social group regarding socially acceptable or appropriate behaviour in particular social situations, the breach of which has social consequences

3.1.21 succession plan

process for identifying and developing current employees with the potential to fill key positions in the organization

[SOURCE: BS ISO 30400:2022, 3.2.11]

3.1.22 top management

person or group of people who directs and controls an organization at the highest level

[SOURCE: BS EN ISO 22000:2018, 3.41]

***NOTE** Top management positions may differ from one organization to another and may include, but are not limited to, organization owners, board members, chief officers and the CEO.*

3.1.23 walking the talk

showing that something is true by actions rather than words

3.2 Abbreviated terms

For the purposes of this document, the following abbreviated terms apply.

FSMS	food safety management system
HACCP	hazard analysis and critical control point
MS	management system
PDCA	plan-do-check-act