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BSI Standards Publication

Respiratory protective devices — Selection, use and maintenance

Part 4: Guideline for respiratory protective devices under pandemic of infectious respiratory disease

bsi.

National foreword

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 94, *Personal safety — Personal protective equipment*, Subcommittee SC 15, *Respiratory protective devices*.

A list of all parts in the ISO 16975 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

National and international health organisations such as the World Health Organization (WHO) recommend respiratory protective devices (RPDs) and/or other forms of face coverings such as surgical masks and barrier masks as part of a strategy for the prevention and control of infection and to limit the spread of infectious respiratory diseases. Depending on the type, RPDs and other mask forms, like face coverings, can be used either for individual protection such as for healthcare workers or in the case of the general public to reduce infectious transmission, i.e. as source control.

This document contains information on risk assessment, on the selection of adequate and suitable RPD and provides essential guidance on its use, care and maintenance. This document details the requirements for adjusting or establishing and implementing a programme for the use of RPD during a pandemic/epidemic/outbreak of an infectious respiratory disease.

Infectious respiratory disease can be transmitted in several ways. Transmission modes can include:

a) “droplets”, which are relatively large airborne particles containing the pathogen;

b) “aerosols” or airborne transmission, which consists of smaller particles with effective transport over distance and longer residence time in the air;

c) “contact”, whereby the pathogen is transmitted to the nose, mouth or eyes via a contaminated surface.

Exposure via all routes to an infectious respiratory disease should be eliminated or effectively controlled and reduced to a minimum by the application of adequate protective measures. Aerosols and smaller droplets can be significant airborne inhalation hazards.

Due consideration of other occupational hygiene controls and infection prevention measures such as engineering and administrative controls like ventilation, social distancing, environmental cleaning and hand hygiene should be given in conjunction with the selection and deployment of RPD by way of a sufficient and suitable risk assessment.

The informative annexes provide an explanation of the difference in performance and purpose of RPD and their various national and jurisdictional standards, as well as an explanation of the role and uses of surgical/medical masks and face coverings (barrier masks).

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Respiratory protective devices — Selection, use and maintenance —

Part 4: Guideline for respiratory protective devices under pandemic of infectious respiratory disease

1 Scope

This document specifies detailed information to assist the responsible person to select, use and maintain respiratory protective devices (RPD) in the context of a pandemic/epidemic/outbreak of infectious respiratory disease at the workplace. This document is intended for workplace applications and to guide those developing pandemic-related respiratory protection programs.

The guidance contained in this document is not intended to be exhaustive but highlights important aspects to which attention is given. It is used in conjunction with ISO/TS 16975-1, ISO/TS 16975-2 and ISO 16975-3 for all workplaces, including healthcare.

This document focuses on particle filtering RPD only, as respiratory protection against pathogens.

This document does not apply to RPD programmes for RPD used exclusively for medical life support respirators and resuscitators.

The information contained in this document can be used to assist in the preparation of national or local regulations and guidance; however, this document does not supersede national or local regulations and guidance.

This document is not applicable to non-workplace situations.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
aerosol
suspension of solid, liquid, or solid and liquid particles in a gaseous medium, having a negligible falling velocity (generally considered to be less than 0,25 m/s)

[SOURCE: ISO 16972:2020, 3.6]

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