ISO 16975-3:2017-09 (E)

Respiratory protective devices - Selection, use and maintenance - Part 3: Fit-testing procedures

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 General 3

5 Competentfit-testoperator 4
5.1 General 4
5.2 Qualifications 4
5.2.1 General 4
5.2.2 Knowledge of RPD used for the fit test 4
5.2.3 Knowledge of the fit-test method 4
5.2.4 Ability to set up and monitor the function of fit-test equipment 4
5.2.5 Ability to conduct the fit test 5
5.2.6 Ability to identify likely causes of fit-test failure 5

6 Generalfit-testconsiderations 5
6.1 Medical clearance 5
6.2 Training for RPD wearers 5
6.3 Interference concerns 6
6.3.1 Facial hair 6
6.3.2 Foreign material 6
6.3.3 Personal protective equipment (PPE) and other items that may interfere with fit6 6.3.4 Other conditions that can adversely affect fit 6
6.4 Frequency of fit testing 7
6.5 RPD used for fit testing 7
6.5.1 General 7
6.5.2 RPD used for QLFT 7
6.5.3 RPD used for QNFT 8
6.5.4 Sampling for aerosol systems 8
6.5.5 Maintenance of equipment and RPD used for fit testing 8
6.6 Selecting RPD 8
6.6.1 General 8
6.6.2 Comfort-assessment period 9
6.6.3 Required fit factor 9

7 Fit-test records 10

8 Fit-testing procedures 10
8.1 General 10
8.2 Respiratory interface 11
8.3 Briefing the fit-test subject 11
8.4 Fit-test exercises 11
8.5 Qualitative fit testing (QLFT) 12
8.5.1 General 12

8.5.2 Aerosol qualitative fit tests 12
8.5.3 Taste-threshold-screening 13
8.5.4 Fit testing 14
8.5.5 Vapour qualitative fit test with isoamyl acetate (banana oil) 15
8.5.6 IAA fit-testing procedure 17
8.6 Quantitative fit testing (QNFT) 18
8.6.1 General 18
8.6.2 Generated aerosol quantitative fit-test procedure 18
8.6.3 Ambient aerosol condensation nuclei-counting (CNC) instrument quantitative fit-test procedure 20
8.6.4 Controlled negative-pressure (CNP) REDON quantitative fit-test procedure 22

Annex A (informative)ExampleofanevaluationformforRPDcompetentfit-testoperator 25

Annex B (informative) Explanation of different RFF based on QNFT method 26

Annex C (informative)Criteriaforevaluatingnewfit-testmethods 27

Bibliography 28