

RESPIRATORY PROTECTION & BEARDS

Does facial hair affect
your safety?



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Manufacturers we work with

Dräger

BLS

JSP

MOLDEX

PureFlo

3M

Sundström

Honeywell



Scan to view
our full range of
Respiratory Protection



With over 35 years of experience in the market working with all the key manufacturers in the business, Anchor Safety, technical specialists in respiratory protection, can offer an unparalleled level of expertise. Selling to a wide range of customers from blue-chip multinationals to local businesses, Anchor Safety do not just provide products, but offer the advice and assistance necessary to safely protect your workforce and ensure your legal compliance.

As well as designing and implementing RPE programmes, for both single and multi-site clients, our experts also offer full site assessments, training and change management expertise, face fit programmes and dedicated account management.

Anchor Safety can also provide ongoing support packages to fulfil customer requirements for maintenance and care of their RPE programmes. These are bespoke packages which can integrate with a client's existing equipment, or set-up from new, with purchasing and onboarding of new equipment as the need arises.

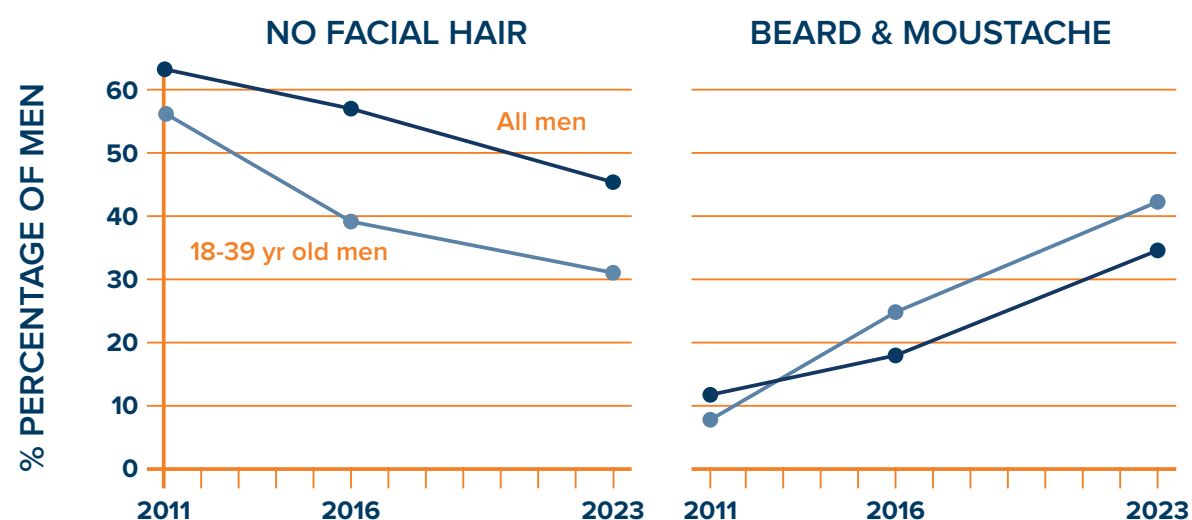
All of this comes with our solid commitment to great customer service: We look forward to showing you that the Anchor Safety Experience is second to none!

The majority of men now have some form of facial hair.

Since 2011, YouGov surveys have been tracking the fast-growing trend towards facial hair in the UK.

Starting as a fashion for stubble, the beard has now taken over, with most men (54% in 2023) saying they now have some form of stubble, beard or moustache.

54%



Beards are particularly fashionable among younger men (those aged 18-39), with seven in ten men in this age group having some form of facial hair (69%).

While this indicates a change in fashion, followers of some religions are required to keep a beard, such as Hasidic Jewish men, some Muslims and practicing Sikhs who follow Kesh (the requirement that no hair on the body should be cut).



The Problem with Facial Hair and RPE Fit.

Unfortunately, facial hair – stubble and beards – compromises the effectiveness of Respiratory Protective Equipment (RPE).

RPE face masks depend on a good seal against the face so that, when you breathe air in, it is drawn through the filter material where the air is cleaned. In the case of powered air (positive pressure) RPE solutions, they are only fully effective if there is an adequate seal around the mask to prevent contaminated air mixing with clean air pushed through by the blower unit.

In either case, if there is any open space around the edges of the mask, 'dirty' air will pass through these gaps and into your lungs.



Your Legal Responsibility as Employer to Provide Appropriate RPE

The law requires you to adequately control exposure to materials in the workplace that cause ill health. This is laid out in the Control of Substances Hazardous to Health Regulations (COSHH).

If you are found to be guilty of breaching COSHH regulations, penalties can include unlimited fines or imprisonment. Carrying out a COSHH risk assessment will help you decide how to prevent harm to health and remain compliant.

If your COSHH risk assessment shows that RPE is necessary, the next step is to ensure that you follow the guidelines provided in choosing the appropriate RPE solution. Some of the key COSHH Essentials Guidelines state:

- ✓ Wearers must be medically fit to wear RPE – seek medical advice if you are not sure.
- ✓ **The RPE needs to fit the person. If the RPE depends on a face seal, it won't work if the worker has face hair or stubble.**
- ✓ Users should check the fit every time they put on RPE.

Why is Face Fit Important?

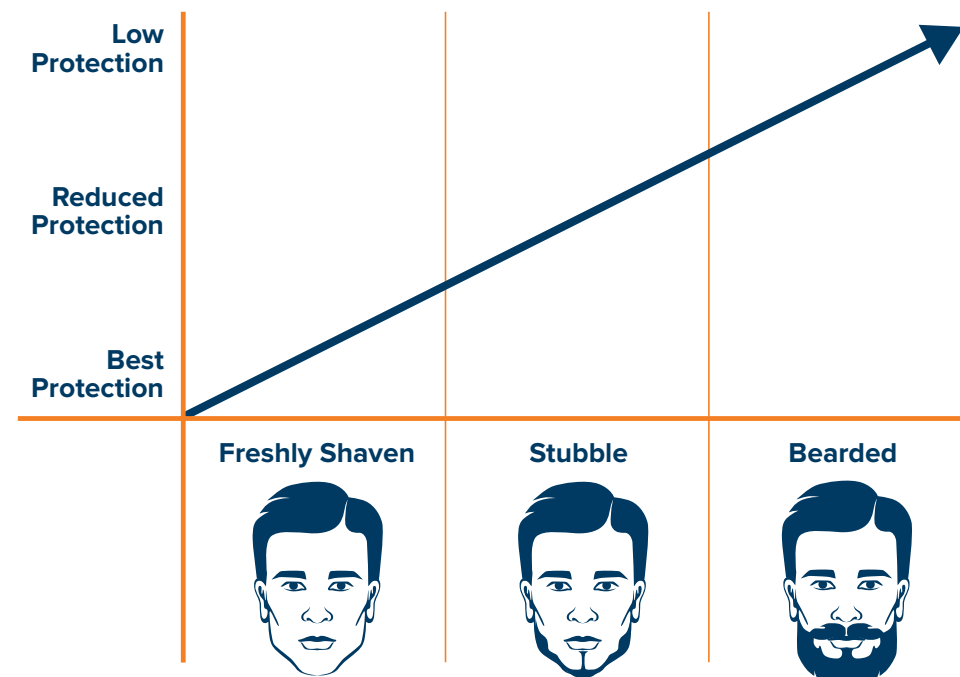
The HSE states clearly that poor fit is a major cause of leaks in face masks and that tight-fitting facepieces need to fit the wearer's face to be effective.

If a mask is loose, particles and fumes can enter the respiratory system, causing short-term and long-term health issues. You can read more about the potential dangers in the [Anchor Safety Expert Guide to Different Respiratory Hazards](#) in the workplace.



Face Fit Testing

People come in many shapes and sizes and their faces vary as much as their bodies. It is unlikely that one particular type or size of RPE facepiece will fit everyone. Fit testing has been developed to ensure that the equipment selected is suitable for the wearer and fits adequately to their face, achieving continuous contact between the skin and the seal.



Fit testing should always be carried out by someone who is appropriately trained, qualified and experienced.

How is Face Fit Tested?

Qualitative Face Fit Testing

...determines the seal quality of face masks and relies on the person's sense of taste to judge how well fitting the mask is. If the person can taste any of a solution sprayed around the mask, the seal is ineffective.

Quantitative Face Fit Testing

...doesn't rely on the individual's sense of taste. It uses more scientific methods, such as particle counting, to judge how effective a seal is and is carried out in surroundings simulating the natural working environment. A device is used to judge how many particles have entered the mask, compared to how many are outside the mask.

Face Fit Testing for mask types

- ✓ Disposable masks can use either qualitative or quantitative testing.
- ✓ Half masks, including those attached to air tanks, can use either qualitative or quantitative testing.
- ✓ Full-face masks should only use quantitative fit training.



Get in touch with the Anchor Safety specialist RPE team to discuss a Face Fit testing programme for your organisation.

Call: 0800 328 5028

The Effect of Facial Hair on Face-Fit

Being clean-shaven when wearing any mask which relies on a good seal to the face will help prevent leakage of contaminated air through the edges of the mask and into your lungs. A clean shave will ensure you will be breathing in clean air and your lungs will be protected from damage.

There is clear evidence that beards compromise face fit. This can be seen in research from multiple sources, including this one published in Scientific journal 'Science Direct' regarding the [BEARDS \(Benchmarking Adequate Respiratory Defences\) study](#) carried out in an Australian teaching hospital.

In the UK, the HSE has sponsored a study which concludes that the [less facial hair, the better the protection](#).



Hair makes it impossible to get a good seal of the mask to the face.

Bear in mind that many silica particles, for example, are of respirable size (less than 10 μ in diameter) – around 100 times smaller than a grain of sand, while the average beard hair diameter is 0.1mm.

British Standard guidance is that wearers of an RPE mask dependent upon a tight fit should shave within 8 hours from the start of their shift (although rate of growth differs between individuals).

Risk assessments should take account of work patterns and the possible need to shave during the working day. Workers union Unite advises that employers should provide appropriate facilities and allow paid time to shave.



Is Asking Workers to Shave Off Beards Discriminatory?

This problem has led to many businesses to controversially consider banning facial hair to ensure their workers can remain safe from respiratory hazards.

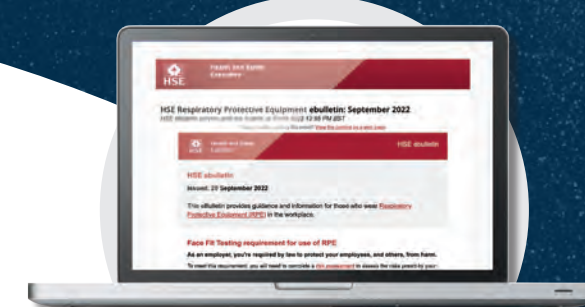
Employers can require male employees to shave so long as it doesn't infringe on their civil rights or cause undue hardship: a ban on beards could potentially be indirect discrimination on grounds of religious belief under the Equality Act 2010. Additionally, some people may not be able to wear a respirator mask for medical reasons, for example people with a skin condition exacerbated by effect of a tightly fitting mask. Workers in both these situations have been successful in challenging their beard ban in court.

Such is the strong feeling amongst workers against being forced to go clean-shaven, the Beard Liberation Front was created: A semi-serious organisation that has drawn attention to some more serious issues, having spoken out against, among other incidents, the suspension of a [fireman for refusing to shave off his goatee](#) and the [banning of beards among ExxonMobil oil workers](#) (in both cases employers claimed that beards interfered with breathing apparatus).

HSE requires businesses to remove the risk, without removing the beards.

In September 2022, an [HSE e-bulletin was released](#), reminding employers that, under health and safety law, they cannot require workers to be clean shaven: This is because alternative types of RPE to tight fitting respirators are available and can be used instead.

<https://content.govdelivery.com/accounts/UKHSE/bulletins/32c09d5>



An Alternative to Fitted Respiratory Masks.

If a worker's beard does not fit fully within the face fitted seal of a mask and shaving is not an option, the alternative is a head top such as a **hood or helmet and visor**. These do not require a face fit and are compatible with powered or passive air systems. They will connect to the same powered air units, breathing apparatus or supplied air systems and are a completely safe and compliant alternative.

Integrated headtops are also available, where all the equipment is in the helmet. This leaves no need for waistbelts and mounted power units, hoses and filters.



If you need advice on which RPE solution to use in your workplace, call our experts. They can help you make the best decision for your business, ensuring your compliance and your workforce's health.

HOODS & HELMETS

The Anchor Safety range of hoods and helmets are designed to protect from a wide range of hazards and all are ideal for situations where a face fit is not possible due to headwear or beards.

H40-59810

Dräger X-plore 8000 Standard Hood

The Dräger X-plore 8000 Standard Hood is designed to be used with the Dräger X-plore 8000. The Hood is ideal for a range of workplace environments and protects you from various hazards.

H40-59870

Dräger X-plore 8000 Premium Hood - Long

A lightweight premium long safety hood, designed to keep out harmful particles or fumes, used as part of the Dräger X-plore powered respiratory system. This long version is made for limited-use applications and covers the head, face and neck area.

It also features a dual-layer neck guard for additional safety when worn with a protective suit. The hood is made from a low noise, soft material and incorporates a guided breathing inlet which guides the air away from your head and avoids it focusing on a single spot.

A spacer at the top of the polycarbonate visor helps to define the curvature, ensuring low visual distortion. With a removable sweatband and adjustable straps, the hood offers a comfortable fit and is ideal for applications where mechanical head and eye protection are not required.

H40-59850

Dräger X-plore 8000 Premium Hood - Short

A lightweight premium short safety hood, designed to keep out harmful particles or fumes, used as part of the Dräger X-plore powered respiratory system.

The hood covers the head and face, leaving the ears uncovered for communication purposes. The hood is made from a low noise, soft material and incorporates a guided breathing inlet which guides the air away from your head and avoids it focusing on a single spot.

A spacer at the top of the polycarbonate visor helps to define the curvature, ensuring low visual distortion. With a removable sweatband and adjustable straps, the hood offers a comfortable fit and is ideal for applications where mechanical head and eye protection are not required.

H40-57444

Dräger X-plore 8000 Helmet with PC visor L2Z

Dräger X-plore 8000 powered respirator helmets provide effective mechanical head protection combined with maximum comfort.

Regardless of whether you are dependent on ambient air or working independently, the powered respirator helmets are an integral part of our Dräger X-plore 8000 powered air-purifying respirator systems and Dräger X-plore 9300 compressed air line device.

H40-59900

Dräger X-plore 8000 Respirator Headpiece with PC Visor

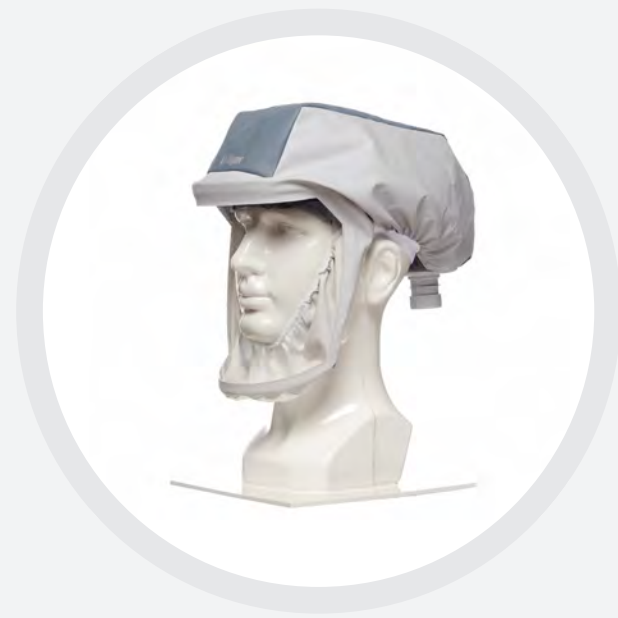
A polycarbonate respirator face shield designed to shield your eyes and ensure complete respiratory protection when used as part of the Dräger X-plore 8000 system.

H40-59940

Dräger X-plore 8000 Automatic Welding Visor

A welding respirator visor with automatic filters and darkness adjuster. Offers respiratory protection as well as eye protection from welding arcs.

NOT compatible with Airline systems.



INTEGRATED HEADTOPS

For those who prefer to avoid waistbelts and airlines, our wide range of integrated head tops, a selection of which are shown here, are a further configurable powered respiratory protection option. With the battery contained in the head top, there are no waist mounted power units, filters or connecting hoses - everything is in the helmet. These head tops are also completely configurable for use in a wide range of industrial applications, for your precise air purifying and wearer requirements. **Please contact our experts to help you configure the best respiratory solution from our full range.**

PUREFLO ESM NON-INCENDIVE

A Powered Air Purifying Respirator System with Integrated Eye and Head Protection: This is a comfortable, self-contained, lightweight powered air purifying respirator that does not require face fit testing, as it can be used safely with beards and/or prescription spectacles. The respirator is powered by two rechargeable batteries that are held inside the respirator.

Providing protection against:

- ✓ Solid and liquid aerosols
- ✓ Full head protection
- ✓ Faceshield providing full eye protection from impact and splash liquids
- ✓ No trailing leads, hoses or cables eliminating potential snagging
- ✓ Multiple helmet colour options, to suit your brand or working area
- ✓ No cumbersome waist-mounted blower unit



H60-0011
PureFlo PF33 Series ESM Non-incendive
Short Duct Build Helmet

Includes:

- ✓ Yellow or White Hard Hat
- ✓ Black Neck Cape
- ✓ P3 Filter (optional filter available: ABEP3)
- ✓ 8 Hour Option (2 Batteries)
- ✓ Individual Charger x 2
- ✓ EN12941, EN397, EN812, EN166, IEC6007915:2001, TH3



H60-0010
PureFlo PF23 Series ESM non-incendive
standard build helmet

Includes:

- ✓ Bump Cap
- ✓ Black Or White Neck Capes
- ✓ P3 Filter (optional filter available: ABEP3)
- ✓ 8 Hour Option (2 Batteries)
- ✓ Individual Charger x 2
- ✓ EN12941, EN397, EN812, EN166, IEC6007915:2001, TH3



H38-7018
JSP Powercap Infinity Respirator

One of the best options when it comes to respiratory protection. The JSP Powercap Infinity Respirator combines head protection, high efficiency filters, a panoramic impact visor, and ear defenders all into one package..



4 in 1 Fully Integrated Protection

1. HEAD PROTECTION

- ✓ Built around an EVO5 industrial safety helmet combining a super strong ABS shell for superior all day protection with the comfort of the Evolution 3D-Adjustment harness system.
- ✓ Conforming to: EN397.

2. HIGH EFFICIENCY FILTERS

- ✓ High capacity HEPA filters coupled with aerodynamically optimised pre-filter covers ensure PowerCap Infinity delivers 160 litres per minute of clean air to the user with maximum battery efficiency. Filters can be changed easily with the quick-change bayonet system.
- ✓ PowerCap Infinity provides users with clean air to the level of EN12941:1998 + A2:2008 TH3P - The highest possible rating with an APF of 40.

3. PANORAMIC IMPACT VISOR

- ✓ The optical class 1 visor offers impact protection at speeds of up to 270mph (Tested using a 6mm steel ball bearing). The visor has a replaceable peel-off visor protector to prolong its life.
- ✓ Conforming to: EN166.1.B.

4. EAR DEFENDERS

- ✓ Developed to seamlessly integrate with Sonis helmet mounted ear defenders and peaks at an unbeaten level of 36 SNR.
- ✓ Conforming to: EN352-3.



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