HAND HYGIENE
AT WORK

# Hand Sanitiser Messaging Guidelines

Further copies available at:
http://www.handhygieneatwork.com

# Contents

## Who are these guidelines for?

These guidelines are designed for :
**Site managers** who purchase or commission hand hygiene messages.
**Designers** who produce hand hygiene messages.

# Introduction

## Why do you need to think about hand hygiene messaging?



A dispenser at the Thackray Museum of Medicine, UK
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### Messaging Matters!

We all want our hand sanitisers to be used widely by our workforce to lower the risk of common infections spreading. Effective messaging can not only make hand sanitisers more noticeable but they can also make them easier to recognise, read and remember. Visuals and messages are a low-cost way to encourage hand hygiene and are highly suited to work settings [1].

Messages can consist of text and/or pictures and can take the form of labels e.g 'Hand Sanitiser Station' or they may be more motivational e.g. 'One pump is all it takes'. These guidelines will help you be aware of and think further about your own use of messaging in the workplace.

You don't need to take every step in these guidelines but they're all worth considering.

### How were these guidelines created?

These guidelines are based on a systematic review of hand hygiene messaging research- we've compiled findings from the latest research to help you understand what approaches work/don't work. We've also drawn on insights from an original workplace survey involving 520 UK participants and a street photographic survey across seven countries including the UK, US, Australia, Belgium, Cyprus, Japan and China.



A dispenser at the University of Leeds, UK
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# Step 1

## Consider your users

Define your users
First, think who your audiences may be. Are they regular users or one-off users such as visitors?

Research studies show hand hygiene attitude and behavior can be different for people with different ethnicities [2], sexes [3] and ages [4]. It's vital that we think more precisely about who our workforce is and tailor messages accordingly.

Try to consider a diverse range of users within slogans and pictures to ensure the message is optimised for relevance.

Remember your audiences and their preferences can change depending on both physical and temporal contexts. For this reason, the contents should be changed regularly. One study [5] suggests the messages should change 6-8 times annually.

Creating personas can be a valuable way to think about your users. Imagine 3 typical users of your spaces, even based on real people, and write down the barriers they face to good hand hygiene in that space. This helps provide empathy and understanding.

Reflective Case study
One study tested hand hygiene behaviour in motorway service station toilet areas in the UK [3]. Research showed that disgust-based messages made more men clean their hands than other messages and knowledge-led messages were more effective for women. Messages that encouraged social comparision - e.g. are you cleaner than someone else, were effective for both sexes. This suggests that different people react differently to messages.

# Step 2

## Consider your content

There is a variety of key approaches you can use to construct messages:

**Provide new knowledge**
Inform people about a fact they may not know.

**Highlight risks or benefits**
Highlight the benefit they can get if they sanitise hands properly or a risk if they don't.

**Use reminders**
Remind them of the importance of hand hygiene

**Use Positive Re-enforcement**
Thank them for using the sanitiser

**Highlight other people's judgement**
Highlight the fact that other people clean their hands and notice if you don't. Compare them with others to highlight a 'social norm'.

Recommendations
We recommend that you try a variety of messages and change them every 6 weeks or so.

Research has highlighted that a range of approaches can be effective. For example, we know that messages that relate to being judged have effectively motivated improved hand hygiene behaviour in the general public [3]. In other studies, new knowledge and knowledge activation (presenting existing knowledge in a novel format) is shown to be considered a successful strategy outside a clinical setting [3,6,7].

# step 3

## Use Slogans

Labels or slogans should use short, simple words and avoid technical and medical jargon aiming to increase readability [8]. A wide variety of slogans can be used, from simple labels  - e.g. 'Hand Sanitiser' to more persuasive approaches.

One study [3] found that shuffling up the order of words/ letters raised levels of hand hygiene in service stations, particularly with female audiences. Other slogans they found effective are shown on the right. These were slogans tested in toilet spaces in relation to hand washing but you can see how they could be adjusted for hand sanitisers.

We also tested a set of simple slogans through a survey with 520 workers in the UK. They are presented in order of 'popularity' below-right.

"Wsah yuor hnads wiht saop"

"Is the person next to you washing with soap?"

"Don't take the loo with you— wash with soap"

"Nearly 80% of common infections are spread by your hands."

"Clean hands keep your loved ones safe."

"Thank you so much for keeping this place safe!" – a message triggered when you use the sanitiser

"There are more germs on your phone and keyboard than a toilet seat."

# step 4

## Consider how the message should be communicated tonally.

**Framing**
Consider whether your message should be positively or negatively positioned?

An example of a positive message is 'clean hands reduce infection'.

An example of a negative message is 'dirty hands spread infection'

**Recommendations**
Studies show that message framing - e.g. whether a message is positive or negative, can affect the persuasiveness of health messages [9,10].

There are two major approaches to framing health messages: framing the message to be positive and motivational or to be negative, highlighting bad consequences if hand hygiene is not practiced.

Studies on hand hygiene show different results.
Positive positioning can improve hand hygiene in organisations [10]. Other studies show negative messages – showing negative consequences if you do not follow the rules – work better [11].

What we do know is that people's personal sense of risk may determine their response to positive or negative messages. If people sense a high risk of not using hand sanitiser then negative approaches may work more effectively. If people perceive a low risk, the positive approaches may work better [12].

We therefore recommend that you test out a few messages in your own organisation across a wide sample of your workforce. When the messages match individuals' motivational orientations this leads to regulatory fit: people feel the messages speak to them, giving them a sense of "feeling right" [9].

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**Tones**
There is a large range of tones that can be used for hand hygiene messaging. These include:
- Positive – highlighting benefits
- Trustworthy / educational
- Friendly / supportive
- Amusing
- Strong / commanding and
- Negative / warning of risks.

**Recommendations**
Whilst we can't recommend a specific tone to use in the message we do know from our survey with over 500 participants that **positive, friendly and trustworthy messages were preferred**.

# Consider the emotional impact of the message

A range of feelings or emotions can be triggered by reading or seeing a message. Here are some of the feelings that hand hygiene messages can trigger:

Guilt
Disgust
Motivation
Satisfaction
Confident
Belonging
Being cared for

In our survey with workers, the top 3 emotions classed as effective in instilling good hand hygiene were 'motivational', 'caring' and 'satisfying'. The example below, from the Thackray Museum of Medicine in Leeds, UK highlights how a friendly tone and humour (with the inclusion of an exclamation mark!) can be used as a tonal technique.



A dispenser at the Thackray Museum of Medicine, UK
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Choosing disgust as one example:
In other studies triggering disgust led to increased use of hand washing [3,11].

Disgust can be communicated in a range of ways: "There are more germs on your mobile phone and keyboard than on a toilet seat" is just one way of making a disgusting comparison. This slogan performed well in our worker survey.

An example of a disgusting poster that led to successful increase of soap use was a picture of a long bread roll containing faeces as a filling [13].

Below is an example of how a disgusting slogan 'Soap it off or eat it later' can be made more disgusting by the use of images [7].
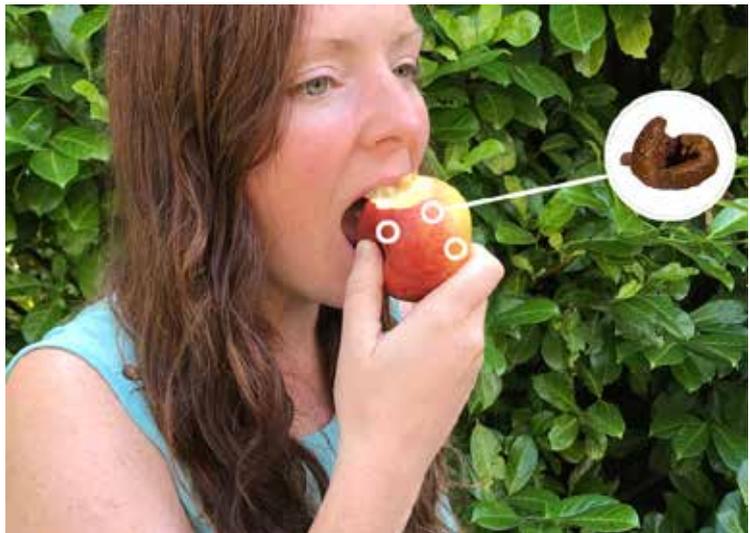


[7] Reproduced with Permission

# step 5

## Use Pictures

Pictures have four advantages over purely text-based messages:
(a) pictures are easier to remember
(b) pictures can make the hand sanitiser more noticable.
(c) pictures can make the message more believable [14].
(d) pictures can convey emotions powerfully [15].

It's worth carefully considering the use of images, despite them perhaps raising the cost of a hand hygiene initiative. Adding an image to a text-based message can significantly alter the intensity of the feeling of disgust as shown in the previous page [7].

Pictures that performed well in various studies are listed below:

Photographs that make germs visible on hands [16]
A picture of 'watchful eyes'  [17]
An image of a 'faeces sandwich' [11]
An image of germs on everyday objects such as phones [2]
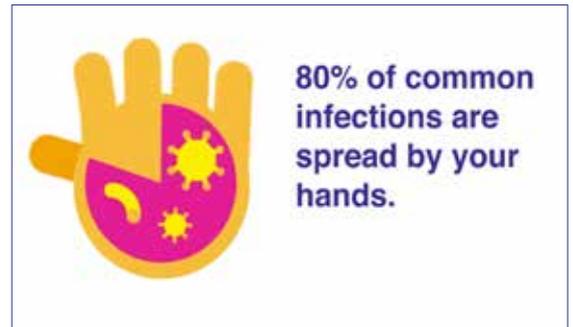




These pictures are available from www.handhygieneatwork.com

# step 6

## Consider other multimedia approaches such as flashing lights, audio or moving images.

Visual or sensual changes in the environment have been used to improve hand hygiene compliance: such as sights, smells and sounds [18]. If technology/budget allows, these could be useful additions to your hand hygiene initiative.

All the suggestions to the right improved hand hygiene in clinical settings. We recommend they also be tested in a more general workplace environment.

Though screens that change when used are not yet standard on the market, one study [19] showed promising results when screen displayed a face turning from sad to happy when the hand sanitiser was used.

Another study [20] showed how a simple piece of red tape that ran along the floor and up to the hand sanitiser raised hand hygiene levels by up to 62% for some hospital staff. Subtle nudging (without messaging) can be an effective strategy to try.

You could try any of the following techiques that raised hand hygiene levels in hospital settings.

Flashing lights placed on top of a hand sanitiser [21]

Motion sensor-triggered audio [22]

A fresh scent added to the area around the hand cleaning space [23]

Red Tape along the floor that leads to the hand sanitiser [20]



A dispenser with flashing light at the National Theatre, London, UK
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# step 7

## Use Icons

In addition to text and pictures containing persuasive messages you could use symbols or icons to help identify the hand sanitisers.
Designers can choose from a palette of multiple visual elements.

Typical visual elements found via analysis of over 200 'typical' hand sanitisers are as follows:
Hands, soap and washing instructions
Human figures
Pictograms of viruses
An arrow or red cross.

Organisational logos, brand icons and other specific symbolic elements linked with the dispenser environment may also be used. For example, a shopping trolley icon in supermarkets helps build a connection between hand hygiene practice and its immediate context.

If you already have professional visual design within your workspace – for example,a visual identity or a way finding system – the style of new hand hygiene signage can be unified with this  but it should also attempt to stand out as much as it can from its environment.

We recommend using TheNounProject (www.thenounproject.com) to source high quality pictograms and icons. Icons should be free of embellishment and quick to recognise.

# step 8

## Use high contrast colours

There are colour choices that need to be considered when designing visual messages.

1. When buying dispensers, choose a strong colour contrast against the background environment. For example, if a background wall is white the choice of a non-white dispenser is recommended. If a white, wall-mounted dispenser has been installed on a white wall, then stand-out, colourful visual prompts are vital.

2. Colours of messages and labels should be designed to stand out from any dominant background colours. Colours should be bright to gain attention.

3. Choose just one, main background colour on visual materials to ensure clarity and immediacy. Attention to colour contrast and visual balance makes sure the message stands out against an environmental background or dispenser colours.

4. Colour can be unified with the colours from organisational brands if these can stand out within the environment where sanitisers are located. This unification can enhance the branding image and organisational commitment through visual unity.



Avoid white sanitisers on white walls



A dispenser at the Waitrose Supermarket UK
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# step 9

## Check for legibility

Choosing the size of visual elements such as font types, colours and sizes depends on where the dispensers are located.

Type style
Overly stylistic or decorative fonts should be avoided [24]. Sans Serif fonts – Helvetica, Universe, Arial - are useful for slogans/messages as they are easy to read and perfect for short 'bursts' of text. Use mixed case letters (e.g. not all capitals) as this also ensures text is faster to read.  Ensure that the sizing is sensitive to where it is placed - print off various font sizes and look at them from a distance. Consider the 'line of sight' of the person walking towards the sanitiser - see the location guidelines on www.handhygieneatwork.com.

### Several criteria determine visual effectiveness of your messages

Does the message command attention?

Can the message easily be detected by the person who needs the information?

Is the message legible at the appropriate distance?

Is the message easy to read at a glance?

Can the message be distinguished from other neighbouring messages such as hazard warning icons?

# step 10

## Get staff involved

Research shows that a strong institutional commitment can lead to hand hygiene behavioural change. Management teams who are involved and engaged with individual users can improve hand sanitation usage [5]. Strong leadership and commitment are needed such that, before implementation, management teams should examine hand hygiene issues uniquely connected to their organisations [4].

Research findings highlight the importance of careful planning and rigorous pretesting of material for an intervention to be effective [25]. Methods used in the process of design decision-making and pretesting materials include surveys, interviews and  meetings. Even a co-design slogan campaign where you ask workers to design messages themselves may be useful. For example, we asked student users to generate ideas for University spaces. They created new ideas to us, beyond the messages found in the hand hygiene literature. The students' most novel ideas used internet memes - an idea our design team would have been unlikely to develop.

### Ways to approach user participation
Involving users in message selection can be an efficient and fun method to improve hand hygiene compliance. Consultation via interviewing workers to give responses to prototype messages is one such technique [19]. You could use questionnaires to allow staff to select from a range of designs and messages [26]. You could also ask staff to rate images or messages in relation to emotions they might trigger  - depending on what your interests were [19].

### Inspirational Case Study
One study used group participation as a method to co-design a hand hygiene campaign. The content of messages was prepared collaboratively with staff across hospital wards, and then translated into a series of cartoon-like messages by an artist. Posters were selected for use during regular meetings and they were changed 6-8 times every year. Each poster was selected by each ward and the staff had a sense of ownership of the campaign [5]. This process helped improve hand hygiene in the ward.

# 5 key principles

Our main recommendations are as follows:

1.  Keep it simple:
Research shows that a simple, informative prompt may have a considerable effect on hand sanitising [2]. The overall style of design needs to be clear, simple and straightforward. This helps any target audience understand the message.

2.  Be Consistent
If multiple materials are going to be used, make sure they look the same – using the same fonts or background colours. Visual consistency makes messages easier to read.

3.  Be aware of visual scale and reading order
If multiple messages are presented, scale and hierarchy need to be considered. Scale means the different size of each visual element; hierarchy means the level of importance of each visual message.  These can be different at different stages. For a location where the automatic sanitiser has never been seen, a label or icon showing it in use might be a priority. If dispensers have been popular in a community for a while, a label or text showing how to use them might be less important than other visual messages, such as inclusive encouragement to sanitise or a polite welcome.
Keeping visual scale and hierarchy consistent with the chosen colour palette is important. Readers' eyes will follow the designed visual prompts.

4.  Make any message inclusive:
Make sure the language, style and image speak across targeted groups: ethnicities / sexual identities / religions / ages. For some public places with a diversity of users, messages should relate to environments, organisational cultures and local customs.

5.  Tailor to specific locations and environments:
Research studies suggest visual hand hygiene messages need to be tailored specifically to individual environments [21]. Signs can even be differentiated across the same organisation with messages varied at different locations.

6.  Change messages regularly
One study [5] suggests the messages should change 6-8 times annually. This helps add an element of surprise for your staff, keeping the messaging fresh, and shows that management are continually engaged with health and safety issues.

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# Credits

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We hope you have found these guidelines useful.

Further copies can be downloaded from:
www.handhygieneatwork.com

You can also download hand hygiene messaging examples and a set of guidelines about hand sanitiser locations at handhygieneatwork.com

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