

FAQ: Using Nudges to Encourage Handwashing with Soap

Handwashing with soap is an effective way to prevent diseases and build healthy futures. For handwashing to be effective, it needs to be practiced consistently and thoroughly. Even when people have access to soap and water, and know how and why to wash their hands, many still do not properly wash their hands consistently at critical times. The handwashing behavior change challenge is not only to encourage people to wash their hands with soap, but to do so correctly and at all critical times. Nudges are one example of a behavior change tool that can encourage people to wash their hands.

It is important to note that there is very limited evidence to suggest that nudges alone will lead to healthier behaviors,ⁱ and not sufficient evidence to recommend nudges as a single approach to handwashing behavior change.ⁱⁱ Overall, the evidence base for nudges is still emerging, and nudges for handwashing have been tested primarily in single contexts or on a limited scale. This document answers some frequently asked questions about nudges, and provides examples of how they have been used in efforts to increase handwashing.

What are nudges?

Nudges are simple cues in our environment that influence us to behave in a certain way. The idea of nudges rests on the theory that behavior is not only based on conscious thoughts and decisions, but that it can be unconsciously guided by choice architecture. Choice architecture is the practice of changing the way that options are presented to people, with the intention of influencing their choices.ⁱⁱⁱ One example of changing choice architecture would be to encourage recycling by providing a large recycling bin next to a smaller garbage bin. Nudges can also include policies that alter how people make specific decisions, like a policy of registering people as organ donors when they register for national ID cards unless they opt out, rather than a separate registration policy.

Nudges influence us to behave in certain ways and perform a behavior without making a conscious decision to do so.^{iv} However, nudges are not mandates. They do not provide new information or incentives—educational posters or handwashing contests, for example, would not be considered nudges. A policy banning unhealthy food in schools would not count as a nudge, but placing healthy options at eye level for children in school cafeterias would be considered a nudge.^v Nudges have been used in marketing and urban planning, and have been tested to encourage healthy behaviors, including handwashing.^{vi} Handwashing is often done as a relatively unconscious habitual action, and can be easily triggered by contextual cues, so it may lend itself well to nudging.^{vii}

Box 1: Testing nudges to encourage handwashing among primary school students in Bangladesh

In a 2015 study, researchers tested the idea of using nudges in school settings to improve rates of handwashing with soap after using the toilet. In two schools, handwashing stations were built in visible and easy-to-reach locations, brightly colored paths were painted from toilets to the handwashing station, and footprints and handprints were painted on the path and handwashing station. Handwashing with soap after using the toilet went from 4% before these nudges were created, to 74% six weeks after nudges were introduced. No other hygiene education was provided as part of the study. This small study does not mean that this approach will be successful in all settings, but does provide a compelling example for how nudges can be applied to influence handwashing behavior.^{viii}

What types of organizations or programs can use nudges?

Nudges are often feasible to implement in a variety of programs and settings. Nudges can be included in programs aimed to increase sanitation coverage or use, larger school or healthcare facility hygiene programs, or in other programs as a simple way to encourage proper handwashing practice.

Handwashing behavior change is applicable to multiple health areas, and nudges may be a feasible way for programs focused on nutrition, healthcare quality improvement, or other related areas to incorporate handwashing behavior change. Inexpensive nudges can be an important tool for handwashing promotion. For example, Thrive Networks installed nudges like those used in Bangladesh (see Box 1) in six schools in Vietnam, and saw about 30% more students washing their hands after the nudges were installed.^{ix}

What resources do I need to develop nudges?

Creating cues to nudge people to wash their hands does not necessarily require a large amount of resources or a significant project budget. Costs will vary depending on multiple factors, including the type of nudges used. In some cases, there may be a need to develop adequate infrastructure to ensure that handwashing with soap can be performed before nudges can be developed. Installing the nudges used in the example in Box 1 cost around \$160 per school, including building materials and masonry.^x

How do nudges fit with other behavior change strategies?

Context and understanding your users are critical to designing any effort to change behavior. In many cases, nudges may be combined with other elements to form a fit-for-purpose behavior change approach. Examples of approaches that could be complementary to the use of nudges include:

- **Habit formation:** Handwashing with soap is a behavior that is often done out of habit, rather than conscious choice. A habit is learned behavior, that is behavior that is triggered unconsciously by cues such as time, a previous action, or a visible cue. Habits lead people to behave unconsciously in a certain way, rather than making a conscious choice for how to behave.^{xi} If your work seeks to assist people to develop handwashing habits, nudges may be an important tool to encourage routine handwashing with soap.
- **Small doable actions:** The small doable actions approach focuses on supporting people to move incrementally from a current behavior towards an ideal behavior. Users take on feasible actions rather than attempting to change their behavior entirely at the beginning. Nudges may be a useful tool to push users towards the next small doable action on a continuum of behaviors.^{xii}
- **Knowledge and motivation:** While nudges can trigger an automatic behavior, this does not mean that efforts to motivate people's conscious decision-making should necessarily be abandoned. Instead, nudges may be used to complement approaches based on emotional drivers, social norms, etc.^{xiii}

Box 2: Nudges as part of a comprehensive behavior change strategy

In Kathmandu, Nepal, Splash improved WASH facilities and implemented a strategy to improve handwashing behavior at 24 schools. Schools were assigned either a teacher-training or peer-to-peer education model, as well as nudges. Nudges included mirrors above handwashing stations, signs with messages to invoke disgust or provide information, and painted footsteps as a path to handwashing stations. Handwashing rates increased from around 9% to more than 65% after this combination of infrastructure, education, and nudges. Students showed a significant preference for using sinks with mirrors, even when those sinks were located farther from a latrine.^{xiv}

How can I select an appropriate nudge?

In examples where nudges have been used to influence handwashing behavior, successful examples of nudges have been simple and easily noticed. For example, when a brightly colored station, with hand sanitizer, was placed in an accessible location and labelled with a normative message stating the impact of using hand sanitizer, use of hand sanitizer among hospital visitors increased from 3% to 67%.^{xv} For handwashing, the presence of soap itself may serve as a nudge to wash hands.^{xvi} Colorful, size-appropriate handwashing stations can also function as a nudge for children to wash their hands.^{xvii}

To determine which nudges might work best for handwashing with soap for a given setting or audience, it will be important to understand the behavior and habits of the people you hope to influence (referred to as the users of your nudges). Consider questions such as:

- What needs to be in place for users to wash their hands? Are soap and water available?
- What will the users do immediately before or after handwashing? Common answers may be cooking or using the toilet.
- Where do users typically look or move toward at critical handwashing times, like when exiting the toilet or preparing to eat?
- What types of colors, messages, or other elements would be eye-catching and engaging to your user? For example, painted nudges should be in a color that clearly stands out from the color of the surface they are painted on.

Strategies to answer these questions include observation, engaging with the target audience to develop the nudges, and later testing them with their audience to determine the nudges' appeal and effect. It is suggested that nudges be:

- **Noticeable.** The nudge should stand out to the user. Using bright colors, or placing items in a visible location or in a user's path of motion, can help nudges be effective.
- **Inclusive.** When implementing a nudge, consider how all users, including vulnerable groups, will be able to interact with it. For example, if a mirror is used as a nudge at a handwashing station, make sure it is not blocked from view for people who use wheelchairs.
- **Simple.** The desired behavior to be nudged should be clearly understandable, triggered, and/or actionable. Even if the person does not consciously interpret the nudge, the nudge should easily translate to the desired behavior.

It is also important to consider how nudges will function in the desired context. Aspects like costs, durability, and complexity of nudges may have an impact on how they are maintained over time. For example, painted footprints in a high-traffic area will likely need to be refreshed to ensure they remain visible.

How can I learn more?

The evidence for the use of nudges in handwashing behavior change remains limited, and further research is needed to understand more about how nudges can encourage people to wash hands. If you do use nudges in your work, consider documenting the results and sharing them with the Global Handwashing Partnership for updates to this brief. These resources point to some recommended reading on nudges:

- The Science of Habit, WASHplus [\[Link\]](#)
- Behavior Change without Behavior Change Communication: Nudging Handwashing among Primary School Students in Bangladesh. International Journal of Environmental Research and Public Health [\[Link\]](#)
- Approaches to promoting behavior change around handwashing with soap, WaterAid. [\[Link\]](#)
- Judging nudging: can nudging improve population health? BMJ. [\[Link\]](#)
- Video: Nudging Handwashing Behavior in Vietnam [\[Link\]](#)

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- ^{xii} Small Doable Actions: A Feasible Approach to Behavior Change. WASHplus, 2015. http://washplus.org/sites/default/files/sda-learning_brief2015.pdf
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