

A Million Microbes

VIDEOS

LESSON
PLAN

STICKERS

CALENDAR

EXPERIMENTS

STIMULUS
PRESENTATION

POSTERS



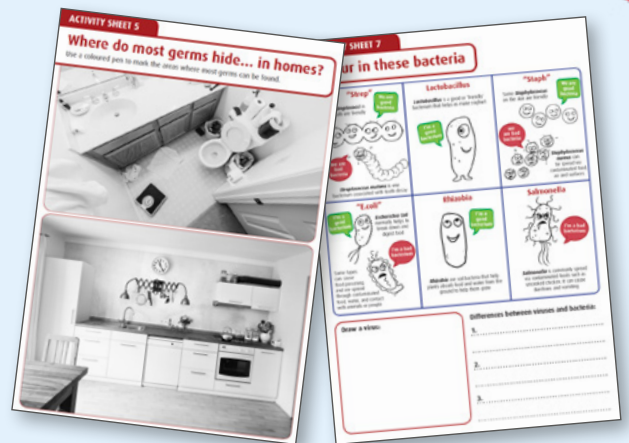
These materials have been created by one of the world's largest providers of handwashing behaviour change programmes, **Lifebuoy**, who have worked with NGOs and governments to reach over 1 billion people.

What is in this resource?



Digital download pack

- Lesson plan
- Stimulus Powerpoint presentation
- Activity & experiment sheets
- 21 day calendar
- Posters
- Certificates



Resources to share with families:

- Leaflet for parents & guardians
- Poster for homes
- Digital comics



Links to video channel

- Crikey It's Cross-Contamination
- Germ-Busting
- Glow Away Germs
- The Blindfolded Gel Challenge
- The Handwash Song



Postal packs

- Posters for washrooms & classrooms (wipeable)
- Washroom & Hygiene Hotspots stickers
- Reward stickers



Learning objectives



Good health gives

- better **attendance** at school
- better **concentration** in class
- better chance to **learn**

The key to good health, is good hygiene and it all starts with handwashing.
This resource aims to support you to deliver these learning objectives:

- Understand what microbes are, that some are good and some are bad
- Understand the risk factors that cause preventable infections
- Understand that visibly clean is not really clean
- Know how and when to wash hands properly with soap or sanitiser
- Take responsibility for my actions to myself and others
- Build healthy hygiene habits that last a lifetime

Supports United Nations Sustainable Development Goals #3 and #4

Even before Covid-19 reached the UK and Ireland, there was a need to support schools in the delivery of education on personal health and hygiene:



MILLIONS OF SCHOOL DAYS ARE LOST EVERY YEAR

England: 31.3 million from avoidable illness

Source: Department For Education, 2018-19

Scotland: 4.1 million from avoidable illness

Source: Scottish Government, 2018-19

Wales: 2.1 million from avoidable illness

Source: Llywodraeth Cymru / Welsh Government, 2018-19

Northern Ireland: 2.2 million from avoidable illness

Source: Department Of Education, Northern Ireland, 2017-18

Republic of Ireland: 10.2 million, with illness being a significant contributing factor

Source: Tusla Education Support Service, 2017-18

49,000 - 245,000 people in the Republic of Ireland catch norovirus (vomiting bug) every year

Source: Health Protection Surveillance Centre/HSE

Threadworms are parasites in faeces that spread easily. 40% of young children in Ireland could have had an infestation at some time. Handwashing prevents re-infestation.

Source: HSE

Handwashing and sanitising with ANY brand of soap and sanitiser helps us stay one step ahead of infections



In Spain, school children who washed their hands, complementing this with the use of hand sanitiser, had a 36% lower risk of school absenteeism due to acute gastroenteritis (1)

School-aged children who washed their hands more than 5 times a day were 53% less likely to contract influenza infection (2)

Lesson Plan: A Million Microbes

Overall objective: help students understand about the different types of microbes, why we need to wash our hands & how we can change our behaviour effectively

TOPIC	LEARNER OUTCOMES	RESOURCES	TIME
Why keep clean?	Understand what the 3 types of microbes are, that some are good, some are bad, how to differentiate them	'If a million ...' chart 'Useful vs harmful microbes' worksheet Slides 1-11	18 min
Where do germs hide?	Learn where germs hide in the classroom and on our hands	'Where do germs hide?' chart Slide 12-17	10 min
Handwashing	Understand that visibly clean may not be really clean. Learn that a quick wash misses important parts like thumbs. Practice how to wash hands thoroughly Learn about soap v sanitiser	Glowgerm gel/powder & UV light Handwashing pledge 'handwashing: true or false?' chart Slide 18-24	15 min
Changing behaviour through understanding responsibilities	Understand basics of behaviour change Develop a personal action plan Practice how to share information while being sensitive to others' feelings	'Changing behaviour' chart 'My handwashing behaviour change action plan' worksheet 'Helping others change behaviour without hurting feelings' worksheet Create a poster Slides 25-31	15 min
21 day challenge	Good hygiene practices are embedded / behaviour change encouraged through 21 day practice	Lifebuoy education Youtube channel 21 day calendar Certificate Slide 32-33	2 min

Total: 60 min

(1) Azor-Martínez E, Cobos-Carrascosa E, Gimenez-Sanchez F, Martínez-López JM, Garrido-Fernández P, Santisteban-Martínez J, Seijas-Vazquez ML, Campos-Fernandez MA, Bonillo-Perales A. Effectiveness of a multifactorial handwashing program to reduce school absenteeism due to acute gastroenteritis. *Pediatr Infect Dis J*. 2014 Feb; 33(2):e34-9.

(2) Torner, N., N. Soldevila, et al. Effectiveness of non-pharmaceutical measures in preventing pediatric influenza: a case-control study. *BMC Public Health* 2015 15: 543.

Curriculum links – A Million Microbes



England

The National Curriculum in England Framework document December 2014

- KS2: pupils might work scientifically by: exploring the work of scientists and scientific research about the relationship between diet, exercise, drugs, lifestyle and health (pg.197)
- KS2: identify that humans and some other animals have skeletons and muscles for support, protection and movement (pg.182)
- KS2: describe the life process of reproduction in some plants and animals (pg.192)
- KS2: recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function (pg.196)

Relationships Education, Relationships and Sex Education (RSE) and Health Education Statutory guidance for governing bodies, proprietors, head teachers, principals, senior leadership teams, teachers 2019

- Primary School: Health and prevention: pupils should know about personal hygiene and germs including bacteria, viruses, how they are spread and treated, and the importance of handwashing (pg.34)

Scotland

Curriculum for Excellence: all experiences and outcomes 2016

- P4-P7: I am developing my understanding of the human body and can use this knowledge to maintain and improve my wellbeing and health (HWB 0-15a / HWB 1-15a / HWB 2-15a / HWB 3-15a / HWB 4-15a)
- P4-P7: I am learning to assess and manage risk, to protect myself and others, and to reduce the potential for harm when possible (HWB 0-16a / HWB 1-16a / HWB 2-16a / HWB 3-16a / HWB 4-16a)
- P4-P7: Through contributing my views, time and talents, I play a part in bringing about positive change in my school and wider community (HWB 0-13a / HWB 1-13a / HWB 2-13a / HWB 3-13a / HWB 4-13a)

Curriculum for Excellence: sciences (biological systems) 2016

- P4-P7 I have contributed to investigations into the role of microorganisms in producing and breaking down some materials. (SCN 2-13a)
- P4-P7 By investigating some body systems and potential problems which they may develop, I can make informed decisions to help me to maintain my health and wellbeing (SCN 2-12a)
- P4-P7 I can report and comment on current scientific news items to develop my knowledge and understanding of topical science (SCN 2-20b)

Curriculum links – A Million Microbes



Wales

Curriculum for Wales: area of learning and experience: health and well-being 2019

- KS2: I have developed an understanding that I need a balanced diet and I can make informed choices about the food I eat and prepare to support my physical health and well-being. (pg.4)
- KS2: I can recognise some of the behaviours, conditions and situations that affect my physical health and well-being, and I know how to respond and get help in a safe way (pg.4)
- KS2: I can identify and assess risks (pg.4)

Curriculum for Wales: area of learning and experience: science and technology 2019

- KS2: I can identify things in the environment which may be harmful and can act to reduce the risks to myself and others. (pg.4)
- KS2: I can recognise that what I do, and the things I use, can have an impact on my environment and on living things. (pg.4)

Northern Ireland

The Northern Ireland Curriculum Primary: personal understanding and health 2019

- KS2: understanding the benefits of a healthy lifestyle, including physical activity, healthy eating, rest and hygiene (pg.96)
- KS2: facing problems, trying to resolve and learn from them (pg.96)
- KS2: understanding that bacteria and viruses affect health and that risks can decrease when basic routines are followed (pg. 96)
- KS2: developing a pro-active and responsible approach to safety, for example, at home, near water, on the internet, watching television, in school, on the farm, around equipment, in the sun, near fireworks (pg.97)
- KS2: recognising the importance of democratic decision-making and active participation at home and in the classroom (pg.97)
- KS2: appreciating the interdependence of people within the community (pg.97)

The Northern Ireland Curriculum Primary: science and technology 2019

- KS2: That humans have skeletons to protect major organs, support their bodies and help them move. (pg.90)
- KS2: The main stages in the life cycle of some living things (pg.90)

Curriculum links – A Million Microbes



Republic of Ireland

National Council for Curriculum and Assessment

- **1st and 2nd classes, SPHE:** The child should be enabled to...
 - develop and practise basic hygiene skills (pg. 27)
 - realise that each individual must take some responsibility for self-care (pg. 27)
 - become aware of how infection spreads easily and the importance of adhering to a code of hygiene (pg. 27)
 - recognise and practise good hygiene when dealing with food (pg. 27)
- **3rd and 4th classes, SPHE:** The child should be enabled to...
 - realise that each individual has some responsibility for his/her health and that this responsibility increases as he/she gets older (pg. 39)
 - recognise and practise good personal hygiene, know how it is maintained and understand its importance in social interaction (pg. 39)
 - understand and explore the relationship between health and hygiene (pg. 39)
 - discuss and examine the importance of proper food hygiene (pg. 40)



How to use these resources



These materials have been designed to be flexible, for use in:

- regular Science or SPHE lessons
- during a dedicated hygiene session in an induction week
- broken into smaller chunks to start the day off in form time

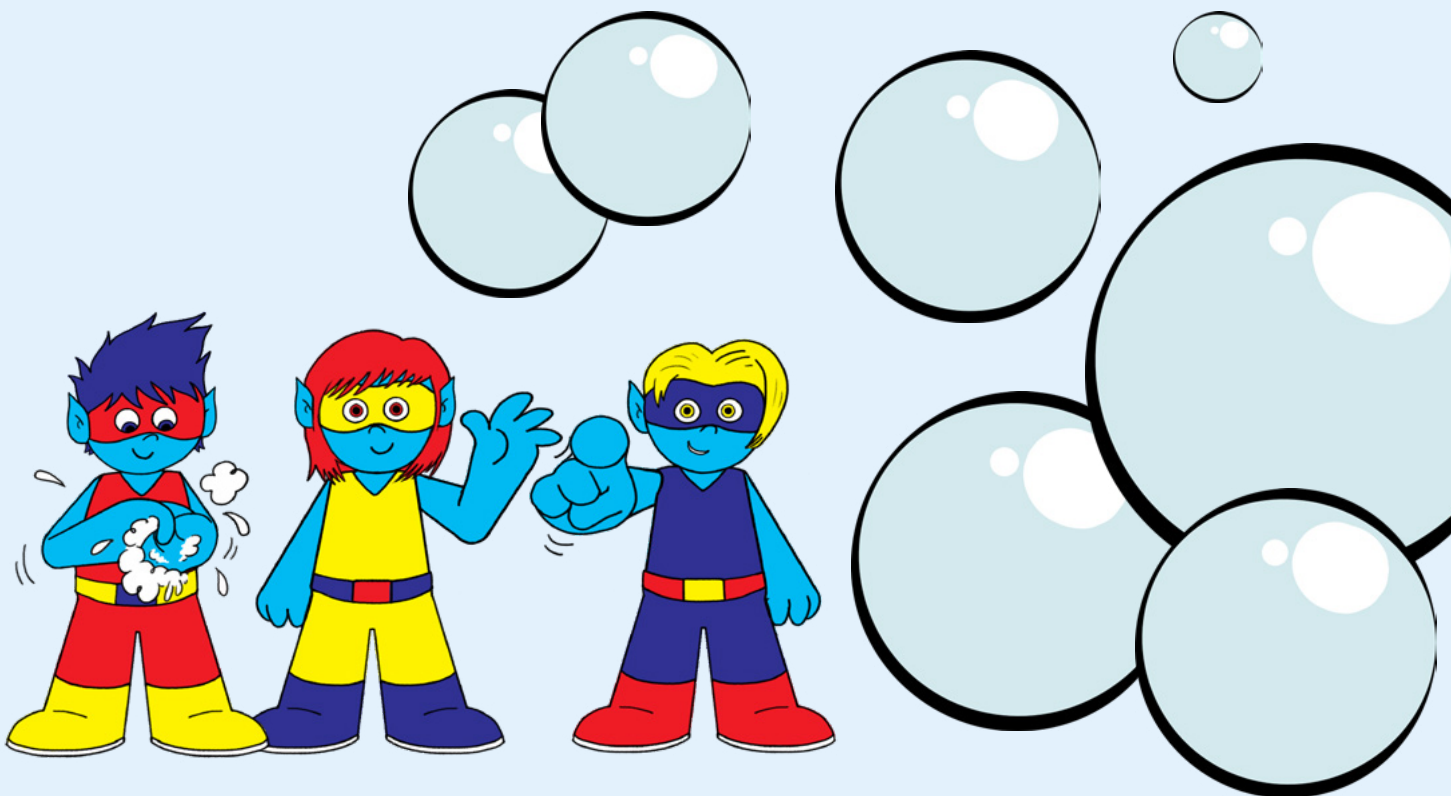
Key times of the year to use these resources

While we need to wash hands everyday, there are particular occasions throughout the year when it's worth a bit more focus on personal hygiene: gatherings and festivals. With the associated excitement of seeing friends, eating special meals and going to special places, some people can forget to look after their hygiene. A holiday or break from normal routines should not be a break from handwashing.

Encouraging behaviour change at school and home

Clearly it's important to reinforce hygiene messages in the home too. To facilitate this, 'Soaper Heroes' resources include materials that can be shared electronically with homes. There's a handwashing poster and comics for storytime.

Additionally, when it is judged to be safe to share physical materials between homes and school, there is a 21 day 'Soaper Heroes' calendar for the student to get signed off at home and then bring back for a celebration in school.



'5 Levers' for behaviour change



'Soaper Heroes' has been created using behavioural science techniques developed by teams of psychologists and academics. These have been summarised in the Unilever '5 Levers' for behaviour change.



It's key to strike a balance between encouraging people to change behaviour while not driving fear and anxiety. This resource necessarily provokes a little worry while, importantly, providing techniques and strategies to help control raised anxieties.

Lever No.1: Make it understood

- Many people believe their hands are clean if they look visibly clean. Unfortunately, that's not true. The 'Glo-germ' demonstration helps students understand that washing hands with water alone is not enough to get rid of germs.

Lever No.2: Make it easy

- For a new behaviour to become a habit, it needs to be seen as easy to do and it must fit into daily routines. This resource makes it easy for students to remember when they need to wash their hands through a song, washroom stickers and a 21-day calendar.

Lever No.3: Make it desirable

- People don't usually do something unless they want to. To encourage students to want to wash their hands, this resource includes fun elements like demonstrations, comics, quizzes and stickers. Studies show that people who commit to a future action in public are more likely to stick to it. This programme asks students to stand up together and commit to a classroom pledge.

Lever No.4: Make it rewarding

- People want to feel good about achieving something, for instance improving their hygiene habits. Students are offered rewards in the form of stickers and certificates for their participation.

Lever No.5: Make it a habit

- Habits are created over time through repetition. Practising a new behaviour every time you encounter a key occasion, for at least 21 days, helps to make it permanent. This programme gives students a 21-day calendar, with rewards on completion, as well as activities to repeat handwashing in the classroom, until it becomes a routine.

About the creators of this resource



These materials have been co-created with one of the world's largest providers of handwashing behaviour change programmes, **Lifebuoy**, who have worked with NGOs and governments to reach over 1 billion people, since 2010.

Lifebuoy was created in the UK in 1894 to provide an affordable way for people to protect against cholera.

This resource has been developed with input from a wide range of experts including:

Chartered members of the **British Psychological Society**: Prof. Angel Chater (University of Bedfordshire); Prof. Lucie Byrne-Davis (University of Manchester) and Prof. Madelynne Arden (Sheffield Hallam University).

Teachers and advisors across the UK and Ireland including Steve & Ana Banks, Megan Bellis, Michael Clarke, Fran Dunworth, Paul Gordon, Clare Mercer, Nicola S. Morgan, Helen Porter, Martin Staniforth.



The **Royal Society For Public Health** is an independent health education charity and the world's oldest public health body, with over 6,000 members worldwide. Their vision is that every community, workplace and individual should have the opportunity to optimise their own health and wellbeing.



The **Global Handwashing Partnership** is a coalition of international stakeholders working to strengthen handwashing access and practice, as a pillar of international development and public health. Member organisations include government agencies, corporations, non-governmental organisations and academic institutions.



**Promoting handwashing and sanitising
with ANY brand of soap and sanitiser**

**BISH
BASH
BOSH
IT**