

# Soap and Water Road Show

Tool Kit to prevent the spread of Illness and Infection through proper hand washing

## Contents:

**Chapter 1**      [Purpose statement – aims and objectives of the Initiative](#)

**Chapter 2**      [Pre-considerations to running the Initiative](#)

**Chapter 3**      [Running the Soap and Water Road Show](#)

Appendix 1      [Invitation to participate letter to schools](#)

Appendix 2      [Questionnaire to schools](#)

# Chapter 1

## Hand Wash and Go Road Show – Preventing the spread of Illness and Infection through proper hand washing

### Introduction – Aims and Objectives of the Initiative

#### Health Challenge Wales

1. The key themes of Health Challenge Wales have been selected because they are considered to be those issues that constitute a significant proportion of the ill health that could be avoided in Wales. One of the key themes is the prevention of the spread of infections. This intervention seeks to prevent the spread of illnesses and infection through person to person and person to surface contact in schools through the teaching of proper hand washing techniques.
2. Evidence suggests that the proper washing of hands is highly effective in preventing the spread of disease. There does not however appear to be general public appreciation of the value of hand washing as an infection control technique. The Global Hygiene Survey carried out in Africa, the US, the UK, Italy, Germany, The UAE, India and Malaysia in 2006 showed that 45% of those polled underestimated the effectiveness of hand washing as the easiest method of preventing the spread of disease. 55% of those polled believed that disinfecting surfaces, avoiding close contact with others and not allowing animals into the house were more effective at preventing disease. The survey also showed that many of the participants did not wash their hands on a regular basis. Americans washed their hands most often (68% of hand washing opportunities taken) Britons came second (57%). Only 15% of Indians washed their hands regularly to prevent the spread of disease. The Global Hygiene Council note that good hand washing is one of the most effective ways of preventing the spread of killer diseases, such as dysentery, as well as the everyday diseases such as food poisoning.
3. A study of 341 children's day care nurseries in the United States showed that infrequent hand washing by children after nose wiping, using the toilet, before meals and before preparing food was associated with a higher frequency of illness.<sup>i</sup>
4. The need for effective hand washing is particularly important in children, who are close contact with other children in a school environment during the day, and are vulnerable to disease due having less developed immunity than adults. Research in the United States suggests that every year more than 164 million school days are lost due to illness. It is believed that a great number of these days could be reduced if children merely washed their hands properly and regularly.<sup>ii</sup> A study of 305 Detroit school children found that youngsters who washed their hands four times a day had 24% fewer sick days due to respiratory illness and 51% fewer days due to upset stomach<sup>iii</sup>.

---

<sup>i</sup> Public Health, 1998; 113 (6):544-551.

<sup>ii</sup> "Vital Health and Statistics, Current Estimates from the National Health Interview Survey, 1995" (U.S. Centers for Disease Control and Prevention and the National Center for Health Statistics, 1998).

<sup>iii</sup> Reuters New Media, [www.foodsafety.gov/~dms/fsehandw.html](http://www.foodsafety.gov/~dms/fsehandw.html)

5. Observational research<sup>iv</sup> shows that young children do not wash their hands as often as they should to prevent the spread of illness, but also do not wash their hands effectively. Practices range from washing only the tips of fingers, to over soaping and not removing soap, encouraging alkali skin conditions and inflaming skin conditions such as dermatitis and eczema, to failing to dry hands properly or at all.
6. Given the importance of hand washing as a method of infection control it is essential that young children understand the need for hand washing, when hands should be washed and the proper way to wash hands to make hand washing effective. This intervention seeks to both raise awareness in children of the need for and value of washing hands and to teach them how hands should be washed. It therefore accords fully with the aspirations of Health Challenge Wales.

---

<sup>iv</sup> 'Hand washing techniques in the under 8's' Wilson R, Elliott MD and Marles P .Paediatric Review 3 1999 412 – 417.

## Chapter 2

### Hand Wash and Go Road Show – Preventing the spread of Illness and Infection through proper hand washing

#### Running an Initiative

##### 1. Initial considerations

Initial considerations for this project have to be addressed, including;

- What is the target group?
- Will the outcome have the desired outcome?
- How can the target group be reached?
- Who are the key partners in the initiative?
- How will the initiative be evaluated
- Will the initiative deliver value for money?

##### 2. Target Group

The target group for this initiative should be selected where the greatest gains can be made from running it. The evidence suggests that children are poor at both knowing when they should wash their hands and at knowing how to wash hands effectively, and that the youngest children are the worst group. The pilot project therefore targeted primary school children, since this is the age group with which it is considered that the greatest gains can be made, however school children of all ages could be included within the target group. Care will have to be taken if older children are selected as the target group since they may be hostile to what is a basic message and may be difficult to interface with, whilst younger children may regard the practical hand washing exercise as more of a 'game' and be more receptive to learning.

Consideration may also be given to selecting pre-school nurseries as the target group, however in such cases the partners must be sure that the children are old enough to understand what they are being shown, which may not be the case with some of the younger children.

Other groups made up of children of the age of the target group can be selected, e.g. brownies or cubs, or other out of school clubs, although such a target group may not reach as many children as would be reached by using schools, or year groups at schools as the target group. These groups outside the school environment may however be more receptive to the message.

##### 3. Achieving the desired outcome

The ultimate purpose of this initiative is to reduce the spread of illness and infection through person to person contact and through person to surface contact. This however is very hard to measure, since members of the target group interface with a considerable number of other groups where they may pick up illness and

infections, such as with their family members, out of school clubs etc., and it is impossible to pinpoint the primary source of infection with any degree of accuracy.

At best this intervention can contribute to preventing the spread of illness and infection between members of the target group whilst they are together at school, by improving hygiene practice and raising awareness amongst the group of the need to practice good hand washing. This will have a knock on beneficial effect of reducing the number of school days lost to respiratory and gastric disorders. It is also valuable as the members of the target group will learn a life skill that they can use outside school, in the home etc, and which they can communicate to others, thereby making the intervention more effective.

#### **4. Reaching the Target Group**

Given that the target group is made up of children at school it is relatively easy to reach. The partners to the initiative should select those schools which have pupils of the relevant age group and approach them about taking part in the initiative. Another important consideration is the availability of adequate wash hand basins; warm water; soap and towels etc in the school. This needs to be checked prior to the Road Show being taken to the school.

Great care must be taken however to avoid any suggestion of stigmatising a school through selection. It may be appropriate to write to all schools with children of the target group and invite them to take part, hence the target group would be identified through self selection, and the issue of stigmatisation avoided. Similar considerations will apply if the target group is to be an out of school organisation.

#### **5. Who are the key partners in the initiative?**

The key partners to this initiative are within the local authority, being the environmental health department and the education department. In the pilot project the Healthy Schools Co-ordinators worked with the EHPs in taking the initiative into the schools. Under the EU ' Healthy Schools Scheme' the Healthy Schools Co-ordinators can roll the programme out to assigned teachers on the scheme.

Those running the initiative may wish to consider involving other partners, such as local pharmacies or chemists, which may be approached to provide resource by way of sponsorship, such as soap or nailbrushes etc to be used in the project. Whilst this would be beneficial it is by no means essential, as this is a low resource initiative.

#### **6. How will the initiative be evaluated?**

As noted in paragraph 3 above this initiative aims to reduce the spread of illnesses and infections amongst the target group, but it is acknowledged that measurement of this outcome is extremely difficult. Whilst school attendance figures can be compared for before and after the intervention any reduction in school days lost to sickness cannot easily be attributed to the initiative, since so many other reasons can be contributing factors.

It is therefore suggested that the initiative will have to be evaluated in a number of other ways. If the target group is primary school children, as in the pilot project, teachers can be asked to supervise the children when hand washing, as can lunch time supervisors. They will be able to see if the good practice taught to the target group during the initiative persists, and children continue to wash their hands properly and effectively. Whilst this relies on perception on the part of those supervising it is valid. The fact that hand washing is being supervised will also reinforce the need to practice good technique and will continuously reinforce this message.

Children can also be asked questions at a fixed time period after the intervention to check whether they remember what they were told and whether they continue to practice what they have learned. Where they are asked whether they wash their hands and if they do so do they do so properly care must be applied to the results given, since evidence amongst adults shows that very high numbers report that they wash hands (91%), but hidden surveillance shows that actual numbers doing so are much lower (83%, being 90% of women and 75% of men)<sup>v</sup>.

## **7. Will the initiative deliver value for money?**

This is a very cost effective initiative. The pilot project cost less than £500. Cost is incurred in making contact with the participating schools, in purchasing a U V light box, used to demonstrate the effectiveness of hand washing during the demonstrations and for the purchase of soaps and nailbrushes etc. The remaining resource is in officer time in visiting the schools and carrying out the demonstrations.

Those running the project may wish to consider adding benefit by designing leaflets for distribution to the children or by purchasing such resources, such as badges or stickers carrying hand washing messages. Such additions would have an effect on the amount of resource required; however this is and remains a low cost intervention.

Given the acknowledged importance of hand washing in preventing the spread of illness and infection and the very small cost of running this intervention it is suggested that it delivers very good value for money.

---

<sup>v</sup> American Society for Microbiology, September 2005.

## Chapter 3

### Soap & Water Road Show

#### The Campaign

Preventing the spread of Illness and Infection through proper hand washing.

#### Preliminary Work

1. This intervention does not require a great deal of preparation. The first requirement is to determine what the target group will be. As noted in chapter 2 the pilot project was carried out in primary school since it was considered that the greatest benefit was to be gained by working with this group of children as the target, however the nature of the target group will be a matter for local decision. Once the target group has been selected the partners to the project should send a letter to the groups outlining what the initiative is and asking them if they wish to participate in it.  
[Appendix 1](#)
2. The equipment required for the 'teaching element of the initiative is a UV light box to be used to demonstrate the effectiveness of hand washing, and material for demonstrating the proper technique for hand washing. It is suggested that a bowl should be used rather than taking children into school toilet facilities, since they will be able to see more around a bowl, and it is more practical when demonstrating using of the light box. Any other material to be used, such as stickers, leaflets, posters or badges should also be sourced prior to the commencement of the initiative.

#### Running the Initiative

3. The intervention is run by one officer who liaises with the Healthy Schools Co-ordinator but could be implemented by a number of officers. The Healthy Schools Co-ordinator can ascertain what work has been done in the school in respect of hand washing, in order to ensure that the intervention is tailored to suit the specific needs of the school. This can be done by questionnaire sent to the school. The questionnaire used in the pilot project is shown as [Appendix 2](#). The officer should initially attend the school and speak with the children in the target group. The EHP would then cascade on the information; leaflets, etc. to the relevant teacher in the school to complete the sessions in the school with the rest of the classes in the target group. The EHP therefore acts as the facilitator and instigator of the hand washing message throughout the school to all target groups. In the pilot project the talk lasted for approximately 20 minutes to those children with a short attention span e.g. reception classes. For those in year 1 and above it can be expanded to 30 minutes + depending on their receptivity.

The talk briefly covered the following points: -

- Bad Tummies / Food Poisoning have you had them?
- What causes them?
- How can we prevent bad tummies / food poisoning?
- Why do we need to wash our hands
- When do we wash our hands
- How do we wash our hands correctly
- Correct Procedure in appropriate language to make it fun e.g. crocodile teeth; butterfly wings; rolling play do; making balls; scissor hands.
- Use of Frank's Fingertips for clean hands (Food Link resource)
- Wash and Dry Hands every time with Frank (Food Link resource)
- Use of soap, warm water, towel and drying hands
- We cannot see the germs so we demonstrate the danger by using the uv unit and glitter bug gel.
- How long do we spend washing our hands (length of time it takes to sing 'Happy Birthday twice')?
- How to wash hands correctly (HSE HOOF pack)
- Food Link free downloads available from their website
- Quiz and 'dot to dot' available from Food Link
- Discuss coughs and colds
- Coughs and Colds spread diseases another good reason for washing hands
- Practical demonstration of correct hand washing

It is important that that level is pitched correctly for the age group of the children concerned to make sure that they remain engaged.

4. Proper hand washing technique should be demonstrated using the UV light box, which will also demonstrate the ineffectiveness of incorrect hand washing technique, by allowing a number of children to use the light sensitive gel, wash their hands and then illuminate them under the light box.
5. It is suggested that the Department of Health guidelines for effective hand washing should be followed:
  - Remove as much visible dirt and grime as possible before washing
  - Wet hands with clean water
  - Apply soap
  - Rub hands together vigorously and scrub all surfaces for at least 20 seconds (This is the time that it takes to sing 'Happy Birthday' twice. In the pilot project this was done once in English and once in Welsh)
  - Rinse with clean water
  - Dry hands briskly on a clean and dry towel.

### **Following up the Intervention**

6. As noted in Chapter 2 this intervention is hard to evaluate. There may be merit in comparing school days lost to respiratory and gastric illness before the intervention with the same figures after the intervention, however as noted there are many other factors that can influence these, and this is not a sophisticated measure of success. Schools may wish, at an agreed interval after the intervention to test the level of retention of information, by e.g. a short quiz covering the same material as was covered by the officer visiting and giving the demonstration, which would go some

way to showing levels of retained information, but does not demonstrate whether the children continue to practice what they have learned. It is suggested however that school teachers and Mid Day supervisors could be asked to watch children and check whether they are washing their hands when appropriate and whether they using correct hand washing technique.

7. Good hand washing technique and knowing when to wash hands is essentially a life style skill. Learning it at a young age will mean that those practicing it will be less likely to pass on illness and infections and may be less likely to be affected by them if those around them also practice them. This is not easily measure able but can be inferred.

## Appendix 1

### Hand Wash and Go Road Show.

Suggested text of letter to schools

Dear Head Teacher,

#### **Re: Hand Wash and Go Road Show**

Proper hand washing is one of the most effective ways of stopping the spread of illness and infections. This is particularly important in schools where illness can be passed from child to child quickly, and can result in children being absent from school due to sickness. There is considerable evidence to show that children do not wash their hands at the appropriate times and do not wash them properly.

The Environmental Health Department of (name) Council is currently running a Hand Wash and Go Road Show, which is a short interface with school children that teaches them why hand washing is important, when they should wash their hands and the proper way to wash their hands. An Environmental Health Practitioner will come to your school and give a short talk of between 20 minutes to half an hour, to the children, which is backed up with practical demonstrations of good and bad hand washing practice and also supported by leaflets and other support materials.

If you would like us to bring the Hand Wash and Go Road Show to your school please contact ( name of contact officer) so that a mutually convenient date and time can be arranged.

Yours faithfully,

No.

## Appendix 2

# School Handwashing Questionnaire

**Type of school :** Nursery  Infants  Junior  Primary

If the school combines any of the above do you have separate toilets for:

Early years Yes  No  KS1 Yes  No  KS2 Yes  No

**If yes please complete a separate questionnaire for each and tick the type of unit.**

Number of children in school:

Number of toilet blocks: Boys  Girls  Shared

Total number of toilets: Boys  Girls  Shared

Number of toilets per block: Boys  Girls  Shared

Total number of wash hand basins:

Number of wash hand basins per block:

Hot water supply: None  Irregular  Constant

Cold water supply: None  Irregular  Constant

Type of taps: Normal  Push tap  Other \_\_\_\_\_

*If more than one type please tick all that apply*

Type of soap: None  Bar  Liquid dispenser  Antibacterial

*If more than one type please tick all that apply*

Hand drying: None  Roller towel  Paper towel  Hot air dryer

*If more than one type please tick all that apply*

Toilet paper: None  On request  Constant supply  Hard  Soft

Supervision: None  Break time  Lunchtime

*Please tick all that apply*

Cleaning: Once a day (when)  Twice a day (when)  When required

Responsible person for the above: \_\_\_\_\_

Replenishment of soap:

Once a day (when)  Twice a day (when)  When required

Responsible person for the above: \_\_\_\_\_

No.

Continued overleaf.....

No.

Replenishment of towels:

Once a day (*when*)  Twice a day (*when*)  When required

Responsible person for the above: \_\_\_\_\_

Replenishment of toilet paper:

Once a day (*when*)  Twice a day (*when*)  When required

Responsible person for the above: \_\_\_\_\_

Access to toilets: Same Building  Via outside

Is handwashing encouraged:

After visiting the toilet:

Before breaks: Morning  Lunch

After breaks:  Playing outside:

Before handling food:

Any other comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Thank you for completing this questionnaire

Please return the completed questionnaire(s) to Carol Maher, Healthy Schools Co-ordinator, Local Public Health Team, 2 Stanwell Road, Penarth, CF64 3EA

*(If you have more than one questionnaire please staple them together).*