



September 2013

IFH Newsheet ([www.ifh-homehygiene.org](http://www.ifh-homehygiene.org))

## CONTENTS

### 1. Latest from IFH

### 2. Events

### 3. News and New Research

#### 1. Latest From IFH

---



#### IFH – What Have We Done? What Are We Doing?

IFH has just completed a new report describing what IFH is, and what it does. The report "Home Hygiene: promoting sustainable health" illustrates the breadth and depth of what IFH has achieved, what specific issues it is currently addressing, and what it is working towards. We hope it gives a real sense of the extent to which IFH has now become a respected global player and influencer, and is making a very real contribution to work being carried out to reduce the global burden of infectious diseases. We hope you find it interesting and informative. Please forward the report to others whom you think may be interested. An electronic copy of the review can be found at: <http://www.ifh-homehygiene.org/public-leaflet/international-scientific-forum-home-hygiene-activity-review-2013>

#### IFH Home Hygiene Training Resource – Bengali Translation



One of the most widely used IFH materials is the IFH Training Resource on Home Hygiene. This easy-to-use resource explains the principles and practice of home hygiene in simple, practical language and is a teaching and/or self-learning for health professionals who are developing hygiene advice for patients or consumers. In 2002 the IFH produced a version of the IFH training resource on home hygiene designed for the specific environment in developing countries. Thanks to the support of the WSSCC, it has now been translated into Russian,

Urdu and, most recently, Bengali. The Bengali translation is available from: <http://www.ifh-homehygiene.org/best-practice-training/home-hygiene-developing-countries-prevention-infection-home-and-peri-domest-3>

#### Giving Hygiene Advice to Consumers

Although our major IFH target audience consists of scientists, healthcare professionals and other hygiene communicators, one of our stated aims is to give support to these groups for communication with patients and consumers. To this end IFH has recently established a new area of

our website called “consumer information”. This website area contains materials, web-based resources etc. collected from a range of sources which are designed specifically for giving hygiene information and advice directly to the public. The web area is being constantly updated and now contains more than 50 entries on topics ranging from general hygiene, hand hygiene, food hygiene, home healthcare, colds and flu, babies, infants, schools, workplace and domestic pets. To browse this area go to: <http://www.ifh-homehygiene.org/consumer-information> If you have any materials or web sites etc. you would be willing to share with others, please send them to us and we will place them on the website. Just go to: <http://www.ifh-homehygiene.org/submit-material>

## 2. Events and Conferences

---

### E-bug European Antibiotic Awareness Day UK Schools Competition 2013



Have you got an innovative approach to teaching? Would you like to share this with others? **European Antibiotic Awareness Day** takes place on 18<sup>th</sup> November, every year, to raise awareness of prudent antibiotic use and the threat of antibiotic resistance. Antibiotic resistance is a growing problem worldwide, with many causes, these include: not completing the prescribed dosage and the unnecessary prescription of antibiotics for viral infections.

This year the team at e-Bug are focusing their competition on the teachers and educators of our young people. There are two age categories: KS2 and KS3/KS4. We know that teaching about antibiotics can be challenging so they are giving you the opportunity to share your approach with other teachers via e-Bug. To enter, send a video recording, YouTube link or written lesson plan, with photos of how you inform your students about antibiotics, to [e-bug@phe.gov.uk](mailto:e-bug@phe.gov.uk), or directly to [vicki.young@phe.gov.uk](mailto:vicki.young@phe.gov.uk). If you haven't got a teaching plan already, that's fine, create a new one! The **winner** will take home **£100** for themselves and **£500** for their school. **Two runners up** in each category will receive **£50 each** and **£150** for their school. This is a **great opportunity to share** your teaching methods with other teachers and educators across Europe and to play a role in the education of our future patients and prescribers, to ensure that antibiotics remain effective treatments now and for generations to come. To find out more, visit: [www.e-bug.eu/competition](http://www.e-bug.eu/competition). The deadline is **18<sup>th</sup> October**.

### Good News for Hygiene – Asthma and Other Chronic Inflammatory Disorders are Not the Price We Have to Pay for Protection Against Infectious Disease

On 6<sup>th</sup> June, the 6<sup>th</sup> Annual Europaediatrics Conference in Glasgow hosted a lunchtime symposium entitled "The hygiene hypothesis, old friends and their implications for child health and home hygiene". The session included a presentation from Professor Graham Rook, University College London, entitled: “**The Darwinian Reformulation: the ‘Old Friends’ Mechanism**” which explained how the original “Hygiene Hypothesis” concept has evolved in the light of the most recent data, suggesting that the microbial exposures we need for regulation of the immune system are not infectious diseases, but the "old friends" from our Palaeolithic past.

The second presentation was by Professor Sally Bloomfield of IFH and the London School of Hygiene and Tropical Medicine and was entitled, “**The Hygiene Hypothesis – the Implications for Child Health and Home Hygiene**”. This presentation looked at the possible causes of the loss of exposure to old friends. It also evaluated possible strategies to reverse the upward trends in allergies and other chronic inflammatory diseases, whilst sustaining protection against infectious disease through good hygiene. Both presentations are available for download at: <http://www.ifh-homehygiene.org/review/hygiene-hypothesis-old-friends-and-their-implications-child-health-and-home-hygiene-symposium>

### 3. News and New Research

---

#### **Combating Antibiotic Resistance – the UK 5-Year Plan**

On Sept 10<sup>th</sup> the UK published its “**Five-Year Antimicrobial Resistance Strategy (2103–2018)**”. Its primary aim is to slow the development and spread of AMR. The aims will be achieved by focusing on action in seven key areas. The first listed target is “**We need to get to a point where good infection prevention and control measures to help prevent infections occurring become the norm in all sectors of human and animal health**”. It is the IFH’s ongoing commitment to ensure home hygiene does not remain the weak link in the chain. It is thus regrettable that this document makes no reference to hygiene/infection prevention in home and everyday life settings. To read the strategy, follow the link:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/238872/20130902\\_UK](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/238872/20130902_UK)

#### **So You Think You’re Laundering at 60°C?**

In the last few months IFH has been reviewing its guidance on domestic laundering. Interestingly the new issue of the UK consumer magazine WHICH? reports the results of tests on 12 UK domestic washing machines set to 60 °C, which showed that two-thirds of machines set to 60 °C do not actually reach that temperature. One model heated the water to just 43 °C, whilst most kept the water cooler than 50 °C for 70% of the wash. The question is, "are these programmes misleading consumers about the hygiene delivery of their laundry?". The report can be found in WHICH? September 2013 ([www.which.co.uk](http://www.which.co.uk))

#### **Lifting the Lid on Toilet Hygiene**

Over the years, there has been constant debate about whether, and to what extent, western toilets might be a route of transmission of infection. In Western Europe, for a long time, the general “expert” consensus was that, for a “normal healthy household”, the infection risk from the toilet was negligible. However, although it seems likely that the risks are less than those associated with hands and high frequency contact surfaces, there is now a feeling that there may be some risk, particularly where someone in the home is vomiting into the toilet or has fluid diarrhoea. The concerns relate both to direct transmission via inhalation of aerosols generated during flushing, as well as surface and hand transfer resulting from aerosol deposition on surfaces around the toilet. This article gives a comprehensive review of the data on this subject that has accumulated from various sources over the past 60–70 years, and highlights some of the changes that have occurred to influence opinion. Some of the change in attitudes has come from increasing concerns about viruses, particularly norovirus, the emergence of *C. difficile*, and the ongoing shift towards shorter hospital stays and increased care of vulnerable groups in the community. The review includes a compilation of the epidemiological studies of disease outbreaks such as norovirus and SARS and the possible relationship to spread via toilet aerosols. The review can be found at: American Journal of Infection Control 2013;41:254-8.

#### **A Disappointing Show of Hands for Hand-Washing**

According to a Michigan State University study, only 5% of individuals observed in restrooms in a college town exhibited satisfactory hand-washing behaviour (wash with clean, running water and soap for at least 20 seconds followed by rinsing and drying). Researchers observed over 3,700 people in public restrooms and found that:

- About 10% of people did not wash their hands after using the restroom.
- About 67% of people used soap; 23% wet their hands but did not use soap.
- Women used soap and engaged in proper hand-washing significantly more (about 78%) than men (about 50%).
- People estimated to be older than college-age washed their hands (about 70%) more than the college age and younger set (about 65%).

- People using restrooms with hand-wash reminder signs used soap more frequently (about 68%) than for without (about 60%).
- People using restrooms with clean sinks washed their hands using soap (about 74%) more than those using restrooms with reasonably clean sinks (about 61%) and those with dirty sinks (about 59%).
- Faucet type—whether standard or motion-activated—did not statistically affect hand-washing behaviour.
- Whereas only about 5% of people washed their hands for 15 or more seconds, about 24% washed for 9-14 seconds; 38% washed for 5-8 seconds; 22% washed for 1-4 seconds.

The research is published in *Journal of Environmental Health* 2013;75:18-24.

### **Study Shows Increased Risk of Respiratory Diseases From Contamination on Hands and Hand Contact Surfaces**

A US study tracked respiratory disease and monitored bacterial contamination on hands and fomites over four months during 64 visits at two child-care centres. The study found that respiratory illness was positively associated with microbial contamination on hands and fomites, as measured using *Enterococcus* spp. *Enterococcus* spp were 0.28 log<sub>10</sub> higher when an individual had respiratory illness, whilst susceptible individuals were 1.62 times more likely to develop respiratory illness within four days with every log<sub>10</sub> increase of *Enterococcus* spp. on hands. The authors concluded that hand contamination as measured using *Enterococcus* spp. is a risk factor for onset of respiratory illness and that faecal indicator bacteria can be used as a metric for hand and fomite contamination. The study can be downloaded at *American Journal of Infection Control* 2013;41:728-733. (DOI: 10.1016/j.ajic.2012.10.013).

### **Household Transmission of *E. coli* O157:H7**

During the investigation of a 2009 outbreak of *E. coli* O157:H7 in a US child-care centre, illness logs were reviewed and parents interviewed to identify classroom and household exposures. Ninety-nine per cent of child-care centre attendees (164/166) and 95% of staff (42/44) submitted at least one screening or follow-up stool specimen. The overall attack rate was 15%. Stool specimens from 31 (30 children and one adult) persons tested positive; Thirteen people (41%) were asymptomatic. Three children were hospitalised, one received a diagnosis of haemolytic uremic syndrome, but no deaths were reported. The median duration of shedding of *E. coli* was 22 days (range, 2–48 days). The authors concluded that their findings suggest that household transmission contributed to the spread of the infection. The study can be found at: *American Journal of Infection Control* 2013 (<http://dx.doi.org/10.1016/j.ajic.2013.03.312>).