

# Wilson's Essential Pool & Spa News



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## THE ISPE



Join the ISPE crew!

Application form on pages  
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(Say Allen sent you!)

KEEP  
CALM  
AND

JOIN THE  
ISPE

VOLUME 3

ISSUE 3

March 2016

Enjoy!

## New ISPE endorsed Pool & Spa Plant manual in April

Studies In Work will be releasing their all new Pool & Spa Plant Operators Manual in April. This will be a ring binder and is designed so readers can stay up to date by adding pages published in this magazine and by this method will stay abreast of new developments. The manual is sponsored by Lovibond, Mineral Supplies International and Aquaplan. All delegates on Pool & Spa Plant Operator's courses will receive this manual as part of the course. This is available also for purchase at only £19.95 Plus P&P from the ISPE. Please contact [Ross@ispe.co.uk](mailto:Ross@ispe.co.uk) to order your copy. So stay up to date and get your copy now!

POOL & SPA PLANT  
OPERATORS COURSE  
MANUAL

THIS COURSE IS



Ensure that inflatables, noodles, woggles, armbands, life-rings, etc. are free from bacteria that can cause major skin problems.



Take advantage of free offer on page 3



### **PSEUDOMONAS INFECTION BLAMED ON WATER WALKER INFLATABLES**

#### **Folliculitis**

Folliculitis is an infection that develops around and inside the hair follicle. It looks like small, yellow pustules that are small pus filled swellings. Research indicates that in the past this has been contracted from Hot Tubs, Spas and pools where the chlorine level is too low or the pH is too high rendering the chlorine ineffective.

About twenty to thirty years ago when large inflatables in pools became popular there were outbreaks of this. The users infected had these rashes develop in the area where their body had swimming costumes on, resulting in longer contact time between contaminated water and their skin. This occlusive (def; something that prevents air making contact) clothing holds the contaminated water containing the bacteria, *Pseudomonas Aeruginosa* in close contact with the skin where it enters the hair follicles breeding *Pseudomonas folliculitis*. There are more than 200 species of *Pseudomonas* but it is thought that *Pseudomonas aeruginosa* is the only species harmful to pool users.



Following this problem, Studies in Work, H&S consultants were called in to take samples from these now deflated units. The staff inflated them one at a time, allowing Allen initially to use an Adenosine triphosphate tester to obtain an immediate indication of conditions inside the items. The results all indicated that the environment was ideal for bacteriological growth. Five litres of tap water was then poured into each of the units and 'swished' around inside of them. A 500ml sample was then taken from them and sent to the UKAS laboratory used by Studies In Work. The results corroborated the



Adenosine triphosphate results showing CFUs (definition: a colony-forming unit is a unit used to estimate the number of viable bacteria in a sample) was in excess of 10,000. The recommendation is there should be less than 10 cfus in 1ml of water. *Pseudomonas* species was greater than 100 and should be zero. This indicated a situation where not only *Pseudomonas folliculitis* could thrive but also *E.coli*, enterovirus, adenovirus and shigella, plus hard shelled protozoans such as *Cryptosporidium*, *Giardia* and *Acanthamoeba*.

Allen spoke to suppliers of these items, some of whom promised to call me back but never bothered. One who did was Angus of Waterwalkerz who kindly provided me with their Normal Operating Procedure for cleaning these balls, see below.

1. Waterwalkerz balls should be cleaned and regularly tested to the same high standard that you should clean all other inflatables, pool toys, floats etc.
2. You should use child-safe antibacterial wipes and child-safe antibacterial spray making sure balls are thoroughly cleaned before and after each session. They should also be tested and swabbed at least once a week.
3. One person should be inside the ball while another person is keeping it inflated by keeping the zip slightly open with the tube blowing air in and out.
4. Balls should also never be stored wet and should be thoroughly cleaned and dried when not in use and should be hung-up in a clean and dry environment (definitely not stored uncleaned, undried and definitely not inside a bag or a box).
5. To ensure that the balls are being properly cleaned, different people should be in charge of cleaning the balls to the ones testing that the balls are clean.
6. If there is any doubt to the cleanliness of anything at your facility including Waterwalkerz balls you should not expose them to public use.



### FATHER-OF-THREE CLAIMS DIP IN A HOLIDAY SWIMMING COST HIM HIS HEARING AND HIS JOB.



Niall Coulter, from Strabane, splashed out on a break to a four-star resort, but a last-minute change left him in a basic hotel.

During the trip, after joining his family for a swim in the pool, he woke the next morning find warm liquid that resembled a "yellow pus-like substance" coming from his ears. The 36-year-old, who now wears a hearing aid, said he had to give up his job as a taxi driver because he could no longer hear his customers' directions. "This has robbed me of my life and career," Niall added. "If I could turn back the clock and get my hearing back, I would do it in a heartbeat. "All it took was spending the first day of my holiday in and around the hotel pool to ruin my hearing.

"This is a living hell. Every day is a struggle because my ears are still pumping out goo three years on. "It's never-ending pain, and now I'm told I need two more operations

on both ears and am stuck with a hearing aid. I don't want any other person going through the hell I'm in."

Niall had been looking forward to his £2,600 holiday in Benidorm with his sisters, wife Sharon and three children.

But, he said, a week before they were due to go his travel agent called him to advise they were changing. On his arrival he was devastated when he arrived to see what his upgraded hotel actually looked like.

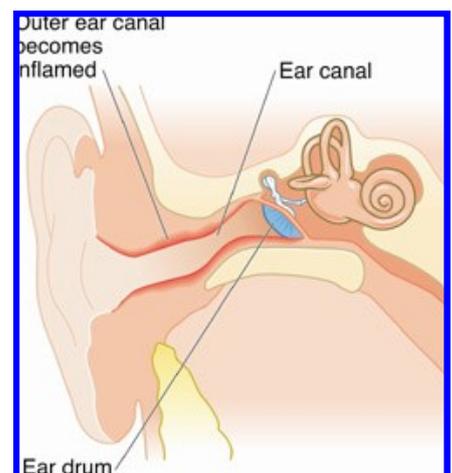
*"It was the absolute pits," Niall said. "It was like a backpackers' hostel, full of young people partying. It would have been fine for a lads' first-time holiday but not in the least bit suitable for a family holiday at all.*

*"The room was in need of a complete overhaul with the shower head hanging off the wall and dirty, broken wooden slats in the bed. "The swimming pool looked like it belonged in the back of a villa. It was nothing like the waterslide pool, kids-friendly resort I had booked and was promised. "I had paid for a fun-filled family break and was given something like Fawlty Towers instead."*

Niall tried to make the best of things and joined his kids playing in the pool at the apartments. The following morning, he woke up and felt warm liquid coming from his ears. He went to the bathroom and was horrified to see a yellow, pus-like substance. *"It was disgusting gunge and was just pouring out like a running tap," he said. "The bed where I was sleeping was covered in it and looked like I had been in the gunk tank, it was that bad."*

Niall went to a chemist who gave him ear drops but then, he said, his ears started ringing loudly and for the rest of the holiday he was unable to go into bars with loud music. "It was a complete nightmare and wrecked the whole holiday," he said. "I could hardly sleep at night, the ringing was so loud. The liquid kept coming out." When he later went to his GP, Niall was diagnosed with swimmer's ear. After returning home in September 2012, he said his hearing suddenly deteriorated. After a series of hospital visits, he was told he had to have an operation on his right ear after the infection worsened. He then had a procedure at Altnagelvin Hospital, a year after his holiday, but his hearing loss continued. Niall said he was then forced to give up his job of three years as a private hire driver.

Allen says Swimmer's ear is inflammation of the ear canal and is aka otitis externa. You need not be a swimmer to get this painful condition, but it gets its name because it often affects children and young adults who swim a lot. It can cause a discharge from the ear of liquid or pus as well as hearing loss. It is often caused by bacteria or fungi invading the ear tissue and triggering a bacteriological infection. Prevention in pools and spas is by maintain appropriate disinfection levels at the correct pH and reinforcing this by regular microbiological testing at a UKAS accredited laboratory on at least a monthly basis, or weekly in HT pools.



YOUR LETTERS

Hi Allen

We have a young family member who is required to use a hydrotherapy pool . As this is a young female would she be able to use the pool while she is on her menstrual cycle or are there any restrictions. We have been looking at some of your information on your excellent website but couldn't find any info on this particular topic. We look forward to your answer and must also congratulate you on many years of research and work on the safety and wellbeing concerning pools and spa.

Kind Regards  
Paul

Hi Paul

Regarding your question I would say that it will be OK if she is using a tampon and this should be changed before and following her swim. If she is using a pad, she would need some form of containment costume or nappy.

The industry is aware that there is likely, on occasions, for small volumes of menstrual blood to be released into pools and this is why a residual of free chlorine is maintained at the correct pH.

I recommend a free chlorine level of between 2.5 and 4.0 and lower if you have Ultra Violet or Ozone treatment with the pH between 7.2 and 7.5.

The chlorine level is higher than in conventional pools due to bathers being possibly compromised and hydro-therapists being immersed for prolonged periods. This is also why microbiological testing at a UKAS laboratory in a HT pool should be weekly.

The only document relating to HT pools was sadly last updated in 1999 and offers nothing on this topic.

Regards

Allen



Unsuccessful applicant for pool of the year competition

**Notification of infectious diseases (NOIDs)**

Registered medical practitioners in England and Wales have a statutory duty to notify their local authority or local Health Protection Team of suspected cases of certain infectious diseases. All laboratories in England performing a primary diagnostic role must notify Public Health England (PHE) when they confirm a notifiable organism. PHE collects these notifications and publishes analyses of local and national trends every week.

Weekly average for last 52 weeks

Malaria	4
Food poisoning	290
Scarlet fever	350
Legionnaires	3
Cryptosporidium	3
Giardia	1



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**WAS THIS THE BEST SPATEX EVER?**

Well I certainly thought so. There seemed to be a lot more people there than on previous years and I had fifty-five visitors at my seminar and what to do when things go wrong. It was at about this time that I stopped wearing the crutches I have been on for over four months and to celebrate I managed to fall over, whilst completely sober and in doing so swapped my crutch for an attractive bright blue plaster cast on my now broken right arm.

Elizabeth Wilkinson of Tintometer commented: "This was probably the most successful SPATEX we have experienced in years. It has become a very professional event and the new location is beginning to attract a new audience, bringing life into the exhibition and new ideas to the seminars. It remains small enough, however, to retain its family atmosphere and encourage great networking. We look forward to its continued success in 2017?"



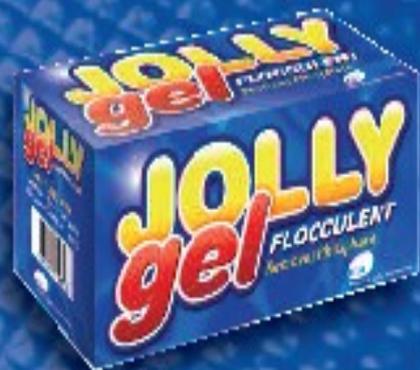
Seen in Swaziland toilet by Bob Kent  
Keep sending them in please!

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## **Bacteriological testing from pools and spas only £47.00 + VAT , including collection**

To ensure compliance with lead body guidance, British Standards and your own risk assessments, pools and spas accessible to the public must be microbiologically tested on a regular basis at a UKAS laboratory

Conventional pools should be tested monthly.

Hydrotherapy pools weekly.

Spas, hot tubs, monthly plus a test for legionella every three months.

All bacteriological tests are carried out at a UKAS accredited laboratory.

All bacteriological testing follows Drinking Water Inspectorate (DWI) guidelines.

Any bad results, you will be notified immediately. We will then advise you of any measures that you need to implement.

Second or subsequent tests at same time (second pool) at £17.00 only. e.g. Pool and spa only 64.00 + VAT

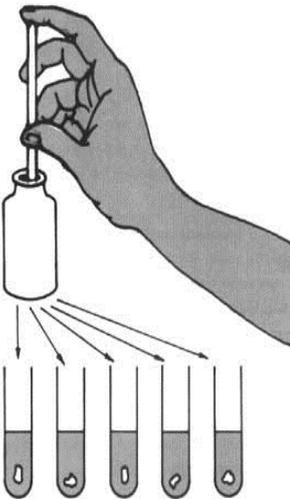
## **Free! Free! Free!**

You will also receive a free help line from Studies In Work for any pool-related issues.

All you need to do is call us at 07885 615547 or email us at [info@studiesinwork.co.uk](mailto:info@studiesinwork.co.uk)

We can also carry out your risk and COSHH assessments and advise you of pool and plant conditions and write your NOP and EAPs regarding pool and plant.

We also provide Institute of Swimming Pool Engineers (ISPE) endorsed training in Pool and spa plant operation, Legionnaires & Asbestos Awareness, Portable Appliance Testing and much more



# THE ISPE



**Application for Membership**  
 Please complete ALL sections of this form in block capitals AND complete the CV overleaf

**Only £25.00 to join!**



Name (in full) .....

Home Address .....

.....

Date of Birth ..... Home Telephone No. ....

(Please note none of the above details are given to any other person or organisation.)

Company Name.....

Company Address .....

.....

Position or Job Title and/or brief description .....

Date your employment with this company commenced .....

Company Telephone No. .... Company Fax No. ....

Email Address ..... Mobile No.. .....

Please state whether you wish Institute correspondence, invoices, magazines etc., to be sent to you at your home address, or to your Company address.....

Please use the reverse of this form for your c.v., or attach it to this application form before asking two members (if known) to propose and second your application.

Proposed by.....Signed.....

(please print name)

Seconded by .....Signed .....

(please print name)

Completed application forms should be sent with c.v. (see over), and the Entrance Fee of £25, to **The Institute of Swimming Pool Engineers, P.O. Box 3083, Norwich, NR6 7YL.**

Please make £25.00 cheques payable to I.S.P.E. or email ross@ispe.co.uk to pay by BACS

If your application is successful you will be advised of your allocated category and will be invoiced for your annual subscription, or that part due for the portion of the financial year remaining.

The financial year commences on 1st July and ends the following 30th June.

I declare that the information given on this application form and the accompanying c.v. is accurate, and hereby apply for membership of the Institute of Swimming Pool Engineers.

I enclose my Entrance Fee and will pay the required annual subscription as and when advised.

**Please reproduce this page as necessary**

**CURRICULUM VITAE**

Applications will be returned, unprocessed if there is insufficient information given on the c.v.

Please give full details of your employment and experience within the swimming pool and/or spa industry

Company name (most recent first)	Job title or position held	Date joined	Date left

**WORK EXPERIENCE**

Please give details of your experience in the swimming pool/spa industry, gained from the positions you have held. Please do not simply state for example 'builder' or 'service engineer' but do give a full description of your job title and the work you typically carry out, (applicants seeking full membership of the ISPE are required to demonstrate via this c.v. at least seven years experience within the pool/spa industry in a technical and/or a responsible position. Associate members must show at least three year's experience.

**QUALIFICATIONS AND COURSES ATTENDED** (including approx. date) If none, state none

**OTHER INFORMATION**, which you may like to give in support of your application

**POOL & SPA PLANT OPERATORS COURSES**



**Happy delegates from a recent course in Sittingbourne Kent**

**NEW POOL & SPA PLANT MANUAL  
COURSE OUT SOON**

This manual will be in a four hole folder and updates will be published regularly in this magazine for delegates to print off, and add to the folder

Up and coming courses

Bexhill-on-sea 8th & 9th March 2016

Bexhill introductory/revalidation 10th March 2016

Doha, Qatar 28th, 29th & 30th March 2016

Algarve, Portugal 13th to 15th April 2016

Provisional dates

April /May

Glasgow

Belize

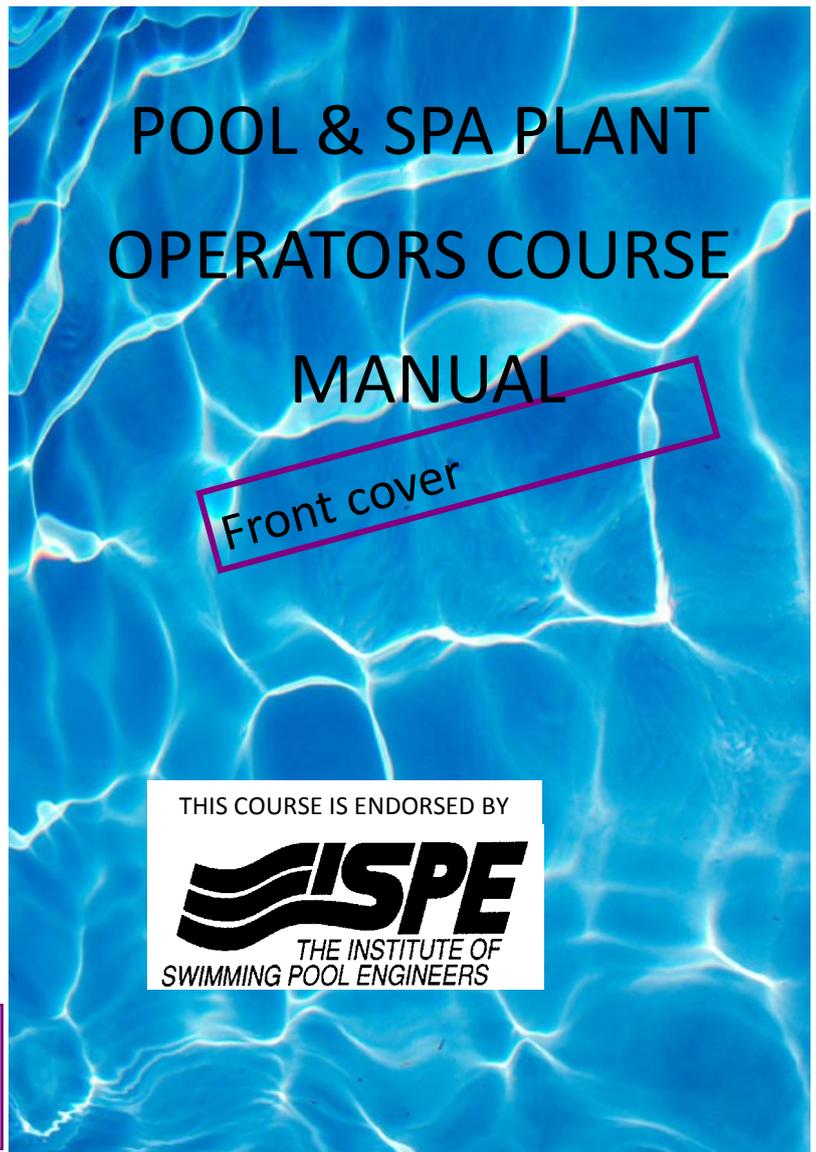
Enfield

Kent

East Sussex



Contact Allen on 07885 615547 or info@studiesinwork.co.uk for your own course or places available



## HAND DOSING IN EMERGENCIES (APPROXIMATE VALUES ONLY)

This topic was covered in my SPATEX seminar; Dealing with pool problems

First calculate pool capacity e.g. Pool length 25 metres by width 14 metres bt shallow end depth 1 metre by 2.0 metres deep end  
 = 25 X 14 X 1.5 (average depth) = 525, 000 litres or 525M<sup>3</sup> or 525 tonnes of water

•Pool capacity = Length x Width x average depth

•To raise	Calcium hypochlorite required	Sodium hypochlorite required
•100,000 litres (22,000 gallons)	1 mg/l (PPM) 165 grams	0.8 litres
•200000 litres (44,000 gallons)	1 mg/l (PPM) 330 grams	1.6 litres
•300,00 litres (66, 000 gallons)	1 mg/l (PPM) 500 grams	2.4 litres
• Our example 525,000 litres	1 mg/l (ppm) 870 grams	4.2 litres

- **Always under-dose rather than overdose**
- **Ensure correct PPEs and RPEs are worn.**
- **Wash equipment used before and after use**



**DID YOU KNOW?** 65% of people in the U.S. do not know how to swim. **Elephants** can swim as many as 20 miles a day, they use their trunks as natural snorkels! **Swimming** strengthens the heart and lungs. **The first filtration system** for a swimming pool was introduced in 1910. **The first woman** to swim the English Channel was Gertrude Ederle, who was actually just a teenager at that time in 1926. **Over 50%** of world-class swimmers suffer from shoulder pain.

My thanks to Jet form for above information

### TRAINING FOR 2016/7

Studies In Work are an independent H&S training consultancy based in Gloucester. Their specialised marketplaces are leisure & education and are presently involved with many private and public providers of these services. If you have a training requirement that we can provide, please do not hesitate to contact us.

We are able to provide either lead body training or Studies In Work courses in your area for £395.00 per day plus expenses plus delegate fees + VAT

The majority of the courses are delivered by Allen J Wilson FISPE Tech IOSH who in recent years has delivered training courses and consultancy in the UK, Eire, France, USA, Spain, Greece, Dubai, Pakistan, Nigeria, Tunisia, Qatar Falkland Islands, Dominican Republic and Kazakhstan. For further details, please visit our website at [www.studiesinwork.co.uk](http://www.studiesinwork.co.uk)

### RISK ASSESSMENT IN SWIMMING POOLS

Under H&S law, risk assessments must be carried out and from these, operational procedures should be written & implemented. Let Studies In Work take this burden off your shoulders by inspecting your pool & plant and writing up your Risk Assessments, Normal Operating procedures (NOPs) and Emergency Action Plans (EAPs) and simplified chemical handling sheets. In recent years, Studies In Work carried out the above with approximately sixty pools ranging from spa baths, school pools, hydrotherapy and free form pools.

### DELAPIDATION SURVEYS

Many pools and plant rooms have now reached the end of their working life and are due (or commonly overdue) for refurbishment. Studies In Work will carry out an independent, unbiased survey on your behalf and provide a written report of what needs replacing, what can be repaired, and estimate the working life left in an item or process. They will also provide provisional costings for these works. Studies In Work are able to write specifications and if required, supervise the installation in its entirety.

A list of referees is available on request

Studies In Work are public liability and professional indemnity insured

### ALSO AVAILABLE!

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