

SIXLOG FAQs

1. What is iHP[®]?

iHP[®] is a revolutionary new advancement in Hydrogen Peroxide based bio decontamination technology. It is the patented process by which a 7.5% solution of hydrogen peroxide and 5% alcohol are propelled through a cold plasma arc creating an ionized, ultra fine mist.

2. Why is ionization such an important improvement to Hydrogen Peroxide bio decontamination technology?

Hydrogen peroxide has been traditionally used as a vapor. While that method has been acceptable and successful, one drawback has been that it is heavy and does not distribute well throughout contaminated spaces. The iHP[®] process of ionizing the hydrogen peroxide creates positively charged particles which both repel each other and attract to all surfaces. This makes the hydrogen peroxide disperse more like a gas and attach to all surfaces in the target area. Additionally, since these positively charged droplets are attracted to all surfaces, iHP[®] technology is not affected by room temperature or humidity.

3. Does iHP[®] disperse like a fog or like a gas?

iHP[®] will disperse like a gas. Once the iHP[®] droplets are passed through the cold plasma arc, they become mutually repulsive, meaning they are forced away from each other, providing better distribution throughout the contaminated space.

4. If the iHP[®] process dwell time is shorter than other Hydrogen Peroxide methods, how can it be effective?

Once ionized, these hydrogen peroxide particles become supercharged acting far more powerfully than they otherwise would through traditional methods. The particles kill upon contact with no long exposure needed. In addition, iHP[®] does not need to saturate the atmosphere before becoming effective; it begins to kill immediately. Most other hydrogen peroxide systems will saturate the environment, laying down a condensate that will kill over time. Moreover, the iHP[®] process produces many other "killing agents," such as ozone, hydroxyls, reactive oxygen species, etc. that will kill much more quickly, reducing both exposure and dwell times.

5. The iHP[®] equipment is smaller and more compact. Why?

iHP[®] is not vaporized using heat as are many hydrogen peroxide systems. As a result, our equipment was designed to be smaller and lighter. This allows for rapid response and low cost mobility as it can be checked as passenger baggage on any airline, bus or train. Subsequently, we can be there when you need us, usually within hours, not days.

6. Does Hydrogen Peroxide damage the interior surfaces?

Hydrogen peroxide has been shown to have very good materials compatibility, including electronics and most surface materials. Since iHP[®] uses a 7.5% solution of hydrogen peroxide (compared to 35% for other service providers), the oxidizing effect is much lower. Additionally, with shorter cycle times, there is less contact time of the condensate, further improving the materials compatibility.

7. What concentration of Hydrogen Peroxide is used in the iHP® process?

iHP® utilizes a 7.5% solution of hydrogen peroxide, while other bio decontamination service providers use a 35% solution. This makes iHP® less likely to corrode or interact negatively with surfaces and equipment.

8. How long does the iHP® process take?

There are 3 steps to the iHP® bio decontamination process: gas, dwell, aerate. First, we gas the interior atmosphere with our iHP® mist. Secondly, the mist is allowed time to dwell in the space. Finally, we aerate the air in the space to remove residual Hydrogen Peroxide. The length of the process is dependent upon the size of the space requiring treatment. The entire process can be done in as little as 2-4 hours for smaller spaces (under 4000 cubic feet) and up to 4-6 hours for a large space (over 40,000 cubic feet).

9. How soon can the SixLog team be at my site ready to work?

SixLog can typically deploy a service team within 48 hours of a customer request for service. For biological emergencies, our rapid response team can be on site in as little as two hours.

10. Is there a room size limit using the iHP® technology?

iHP® process is completely scalable and can be performed on everything from a small closet to a complete warehouse.

11. Does the shipping of SixLog Equipment take a long time and cost a lot?

Since our equipment has been designed for rapid response mobility, we are able to ship it easily and inexpensively. This helps us get to you faster and enables us to be more competitive.

12. What's the difference between sanitization and sterilization?

Sanitization: The process of making something (usually an inanimate object) clean. This is typically defined as a 2-log reduction.

Disinfection: The process of eliminating pathogenic organisms or making them inert, i.e., to kill the germs and bacteria or render them harmless. This is typically defined as a 2-5 log reduction.

Sterilization: The process of completely eliminating microbial viability, i.e., to kill all non-pathogenic and

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pathogenic spores, fungi viruses. This is typically as a 6-log reduction.

13. What is a 6-log kill?

A 6-log kill, also known as sterilization, is the statistical destruction of all microorganisms and their spores. This is defined as 6 logs (10^6) or a 99.9999% reduction. Statistically, this definition is accepted as zero viable organisms surviving.

14. Will iHP® have an effect on my people?

During the iHP[®] bio decontamination process, people are removed from the target area. However, since there is no drift or migration of the mist, it is completely safe for your staff to continue to operate in adjacent areas. The mist is very short lived, only seconds, and will break down very quickly. Rooms can be restored to safe conditions very quickly after the iHP[®] process is completed, typically in less than 2 hours.

15. Do SixLog employees go through a documented training and safety program?

Yes, SixLog has a staff of highly qualified Managers and Field Technicians that are trained and certified in the use of our equipment. In addition, our staff is trained in applicable OSHA safety standards. SixLog maintains a fully documented safety program that is available upon request.

16. How do I know when bio decontamination is complete?

Once the iHP[®] process is complete, SixLog technicians will reopen the space and remove the safety barriers.

17. How does SixLog test the efficacy of its iHP[®] process?

Each time SixLog performs the iHP[®] bio-decontamination process, biological indicators are inserted into the space prior to decontamination. These biological indicators are populated with *Geobacillus Stearothermophilus* spores which are considered the most difficult to kill. Once the iHP[®] process is complete, these same biological indicators will be incubated at the SixLog laboratory for kill verification.

18. How soon will I have results of the iHP[®] process?

Initial readings of the incubated biological indicators will be done after 24 -48 hours in the incubator. Typically, a biological indicator that has not been killed will grow quickly; however, SixLog will incubate for a 7 day period.

19. What documentation does SixLog provide?

Upon completion of the iHP[®] process, SixLog will provide a *48 Hour Preliminary Report* via email. After 7 days of incubation is complete, a comprehensive *Final Report* will be mailed to the customer.

20. What can be decontaminated with the iHP[®] technology?

iHP[®] is effective against viruses, spores and fungi. However, it is not a cleaning agent and is not effective in concealed areas. The mist will be most effective when drawers and cabinets are left open to allow circulation of the mist to attack the surfaces. Please review our biological efficacy data located on the Resource Center page.

21. How are hospital rooms treated?

Since hospital rooms are typically small, the iHP[®] process is very quick. An iHP[®] unit can be placed either inside the room or directly outside. A “pod” or head will be placed inside the room to emit the mist. A typical hospital patient room should be completed in less than 3 hours. During the iHP[®] process, all patient support equipment can remain in the space as the mist does not have any negative effects on electronics. iHP[®] has proven biological efficacy against MRSA, C. diff, VRE and other known “super bugs.”

22. Is Hydrogen Peroxide considered a hazardous waste/substance?

Since we are using a solution that contains only 7.5% hydrogen peroxide, it is not a hazardous substance and can be shipped as any other non-hazardous item. Once the process is completed, the mist breaks down into oxygen and water, leaving no residue or hazardous chemicals.

23. Is Hydrogen Peroxide hazardous to breath?

During the process, the mist will exceed OSHA's permissible exposure limits for humans, which is why all customer employees will not be allowed in the target area during the iHP[®] process. Once the space has been aerated, employees can re-enter the space.

24. Is Hydrogen Peroxide a known carcinogen?

While formaldehyde is a known carcinogen, hydrogen peroxide is not, making it the preferred decontaminant.

25. Is there a SixLog service center near me?

SixLog's parent company, Astro Pak Corporation, has several facilities located nationwide that support SixLog. Therefore, our teams can rapidly mobilize from any of those locations.

26. Does SixLog perform bio decontamination using other technologies?

At this time, SixLog has chosen iHP[®] as its exclusive decontamination technology. If our customers are looking for a specific technology to be used, please discuss it with your SixLog Representative.

27. Is cleaning important prior to decontamination?

Yes, iHP[®] is not a cleaning process. The cleaner the area is prior to the iHP[®] process, the more successful the process will be. iHP[®] does not penetrate liquids and will not be able to get through a very dirty surface. Therefore, pre-cleaning is a very important step in the iHP[®] process.

28. Can I purchase the decontamination equipment?

Yes, please contact your SixLog Representative for details.

29. Does SixLog perform work outside of the United States?

Yes, SixLog is capable of mobilizing services teams anywhere in the world.

30. Does the iHP[®] process leave behind a residue on the treated surfaces?

No. Once the iHP[®] process is complete, the mist breaks down into oxygen and water. The water is so fine that it evaporates and the oxygen goes into the atmosphere. There is no residue or precipitate left behind (like in the case of formaldehyde and chlorine dioxide). This makes iHP[®] the most environmentally friendly or "green" decontaminant of choice.

31. Does iHP[®] prevent the spread of H1N1 (Swine Flu)?

iHP[®] is effective in killing H1N1 and will eliminate it from any target area that is treated. iHP[®] is also effective against Influenza.

32. Can iHP® kill Parvo? Anthrax? Staph?

iHP® is effective against Parvo Virus, Mouse Parvo Virus, Anthrax and Staph. Please see our biological efficacy data for a complete list.

33. Is iHP® effective in eradicating biologic contamination in commercial aircraft, cruise ships, busses or trains?

Yes, since our iHP® generators are portable, we can provide effective bio decontamination service in almost any environment. With 10 offices around the country, SixLog can be at your site quickly and eradicate the source of contamination.

34. What is Northrise University?

Founded by Moffat and Doreen Zimba in 2004, Northrise University is the first nationally recognized private university in Zambia, empowering its students daily with the skills to succeed in the workplace while living Christ-centered lives.

35. Where is Northrise University?

Northrise University is located in Zambia, Africa.

36. What is “Deals for Meals”?

In 2009, Northrise University launched a campaign to feed Zambian students. The average Zambian eats just one meal a day. For \$5, one student can be fed for the entire school week at the University. As a result, SixLog has embarked on an effort to purchase a meal for a student at Northrise University for every project that SixLog completes for customers. We call this program, “Deals for Meals.”

37. Who is Astro Pak?

Astro Pak is the leading cleaning and passivation service provider in North America. Its expertise and technologies extend across myriad industries, among them: biotechnology, pharmaceutical, food and beverage, aerospace and defense, semiconductor, and power generation. Astro Pak is privately held with headquarters in Costa Mesa, CA.