

October 2010

## Monthly Newsletter

**Call to Order: 865-813-1700**  
 Legionella diagnostics using PCR is \$75.00 per analysis

*Changes Coming to AssuredBio.com*  
 -By Dr. Edward Sobek

*Industrial Hygiene Services*  
 -By Irv Kraut

*CDC Elite Legionella Program*  
 -By Merissa McGraw



**Changes Coming to AssuredBio.com**  
 -By Dr. Edward Sobek

Assured Bio Labs, LLC is excited announce its new and improved website for Inspectors. The site offers inspectors the opportunity to log in and download reports. Furthermore, functionality is currently being added to increase revenue opportunities for inspectors, by linking customers who visit the website with inspectors who are in their service provider geographical location. I will explain the details of the customer-inspector interface in future newsletters. We will be looking for beta testers to help us hone this new functionality, if you're interested just drop Ms. Pope an e-mail (lpope@assuredbio.com).

To get setup to download reports give us a call. Or you can go to [www.assuredbio.com](http://www.assuredbio.com) and create an account under the member login box on the right hand side of the page. If you have multiple inspectors working for your company have them all sign up under the same company name. If you would like to have your company logo or business card on your member page, e-mail it to us or drop your card in with your next sample set. Once your reports are uploaded. Ms. Lyn Pope will send you a e-mail with instructions on how to download reports or search for reports. The process will be easy and helpful when you need a report, fast, afterhours or on the weekend.

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**Industrial Hygiene Services**  
 -By Irv Kraut

Assured Bio Labs has added Industrial Hygiene services and consulting to our valued clients. This capability provides the ability to investigate complicated commercial, medical or industrial indoor environmental concerns that range from building related illnesses to water damaged properties with the potential to produce environmental impairment. Industrial Hygiene investigations include restoration protocols when findings reveal such a requirement.

Our laboratory hygienist is available for client consultation on a variety of environmental concerns that includes exposure to surface and airborne pathogens & assistance in understanding your laboratory reports.

Joining our Industrial Hygiene staff is Irv Kraut. Irv brings over 30 years of experience in Environmental Health & Safety and has been published by the USEPA and the American Chemical Society. Irv is also on the board of directors for the Indoor Environmental Standards Organization ([www.IESO.Com](http://www.IESO.Com)).

Irv can be reached by email at: [Irv@assuredbio.com](mailto:Irv@assuredbio.com)

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**CDC Elite Legionella Program**  
 -By Merissa McGraw

Many of you may already know that Assured Bio Labs offers culture and DNA techniques for the isolation of *Legionella*

bacteria from water. What you may not know is we are one of three of the CDC's Elite Labs in the Southeast, one of which is the CDC itself. This means we are required to process proficiency samples in order to show our ability to isolate and identify *Legionella* bacteria from environmental water samples.

The proficiency test works by the CDC sending six different types of samples to Assured Bio Labs: one pure positive, one mixed positive, one pure negative, one mixed negative, one pure variable, and one mixed variable. What do all these mean? The pure positive and pure negative are the only two definitive yes or no samples. The other samples are there to test sensitivity and misidentification of *Legionella*-like heterotrophic bacteria. These samples are positive or negative based on the sensitivity of the isolation used. Here at Assured Bio Labs, we utilize not only the CDC's standard protocol for isolation of *Legionella* from the environment, but our own technique used for isolation through DNA analysis. The benefits of utilizing both are evident by the fact we are more likely to correctly identify the sample 17% more times than the CDC's standard protocol culture technique alone. What do I mean by 17% more likely? Looking at the table below, you can see the CDC standard protocol in the last two rounds has reported two more samples incorrectly as opposed to our three. If you look closer, from the four *Legionella pneumophila* positive samples, the CDC failed to identify this species completely. This species is of particular interest because of the health implications associated with it. As you can see we were able to isolate it 50% more often than the CDC technique alone. You

can also see we have never misidentified a *Legionella*-like sample as *Legionella* either.

Sample Number	Assured Bio Result	CDC Result	Correct Identification
070110-L1	Positive	Positive	<i>L. oakridgensis</i>
070110-L2	Positive	Positive	<i>L. gormanii</i>
070110-L3	Negative	Negative	Negative
070110-L4	Positive	Negative	<i>L. pneumophila</i>
070110-L5	Negative	Negative	<i>L. pneumophila</i>
070110-L6	Negative	Negative	Negative
081010-L1	Negative	Negative	Negative
081010-L2	Negative	Negative	<i>L. chentii</i>
081010-L3	Negative	Negative	<i>L. pneumophila</i>
081010-L4	Negative	Negative	Negative
081010-L5	Positive	Positive	<i>L. dumoffii</i>
081010-L6	Positive	Negative	<i>L. pneumophila</i>

What does this mean for you? You have a highly qualified staff at Assured Bio Labs that is capable of processing your *Legionella* samples with great sensitivity and accuracy. As more proficiency panels are received, I will be working to increase our sensitivity to be able to identify all samples with positives present as well as strictly negative or heterotrophic bacteria samples. The increased sensitivity will then be passed on to benefit samples outside of the CDC's Elite panel, i.e. your samples.

For more information on the CDC's Elite program: <http://wwwn.cdc.gov/elite/Public/EliteHome.aspx>

For more information on our Legionella analysis and cost visit our website.

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### Putting Your Business on Twitter

-By Matthew Dinse

Twitter is a free service that allows anyone to say anything to anybody in 140 characters or less. Now known as the 3<sup>rd</sup> most popular social media site on the net, businesses are catching on to the twitter craze. It allows endless possibilities when

it comes to the growth of your business and merely a time investment needed. Creating a Twitter account is absolutely free and very little computer experience is needed to manage it. Some estimates show that up to 47% of businesses are selling products or services thanks to Twitter, which means it is a powerful tool that should not be overlooked.

#### Popular business ideas for Twitter...

Build an account and immediately start using Twitter Search to listen for your name, your competitor's names, and words that relate to your space (Listening always comes first).

- Add a picture (Your business logo).
- Point out interesting things about your business.
- Share links to neat things in your community.
- Ask questions. Twitter is GREAT for getting opinions.
- Talk about non-business too.
- Advertise specials you are running.

These are just a starter tips to help spread your business name throughout Twitter. With a dedicated attempt, your business should certainly succeed!

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### Spore of the Month

-By Jing Wu

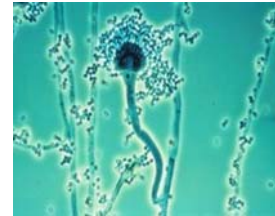
#### Aspergillus

*Aspergillus* is a genus which includes about 200 species. *Aspergillus* species are common contaminants of various substrates. Over 20 have so far been reported as causative agents of opportunistic infections in humans.

The most common causing pathogenic and allergic *Aspergillus sp.* related to indoor air are *A. fumigatus*, *A. flavus*, *A. versicolor* and *A. niger*.

#### *Aspergillus fumigatus*

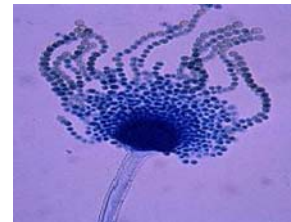
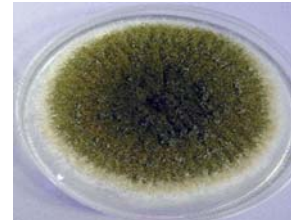
Can cause disease in immune-compromised individuals. *A. fumigatus* grown on certain building materials can produce genotoxic and cytotoxic mycotoxins. It is common in garbage, house dust, compost, humidifier systems and HVAC systems.



*Aspergillus fumigatus*

#### *Aspergillus flavus*

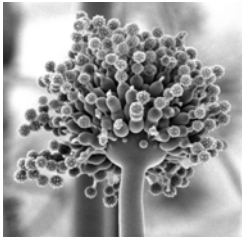
Produces aflatoxins, which is both a toxin and a carcinogen, which can potentially contaminate foods such as nuts. *A. flavus* can be found on water damaged carpets, on building materials and in potting soil. It may cause infections of the ear and eye.



*Aspergillus flavus*

### *Aspergillus niger*

Is often the causative agent of black mold on plants, such as fruits (grapes) and vegetables (onions). This species frequently occurs in house dust and in potting soil. It may be dangerous to humans in sufficient quantities if inhaled, which may lead to severe lung problems. It can also cause fungal ear infections and ultimately damage the ear canal and tympanic membrane.



*Aspergillus niger*

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### Contact Information

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**Follow us on Twitter: [Twitter.com/AssuredBio](https://twitter.com/AssuredBio)**

## The Lab Corner

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By Lyn Pope

Instructions: Unscramble the words below to reveal the answer to the clue.

Merriam Webster defines \_\_\_\_\_ as "The amount of space occupied by a three-dimensional object as measured in cubic units (such as quarts or liters)." When collecting an air sample, it is calculated by multiplying the collection flow rate by the collection time.

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