INFLUENZA AND OTHER VIRAL PATHOGENS

A new season is rapidly approaching when Influenza and other respiratory viral pathogens begin to circulate in our community. The Microbiology Department at Integrated Regional Laboratories offers various laboratory tests for the rapid and reliable diagnosis of common respiratory viral infections.

**Rapid, Direct EIA Test:** Rapid, direct, non-cultural tests are available for the detection of Influenza A and B and respiratory syncytial virus (RSV) by enzyme immunoassay. Separate requests must be ordered for RSV and Influenza A/B testing.

**IMPORTANT NOTE:** Positive results obtained from non-cultural rapid tests reliably establish the diagnosis of RSV and Influenza infections. However, the rapid test is only 60 to 80% sensitive. Therefore, a negative result does NOT rule out viral infection and all negative results should be followed by a more sensitive viral culture test ordered on the specimen.

**Viral Culture:** The R-Mix virus culture system used at IRL allows for the rapid cultivation and detection of seven different respiratory viruses (influenza A and B, RSV, adenovirus, and parainfluenza virus types 1, 2, and 3) within a few days of inoculation. The R-Mix method combines the use of a mixed cell culture system with direct immunofluorescent technology providing rapid laboratory confirmation of the viral agent detected. Confirmation of infection allows for the prompt administration of appropriate antiviral therapy, if indicated.

**Specimen requirements:**
The specimen of choice for these tests is a nasopharyngeal wash or aspirate transported to the laboratory in a sterile container. Alternatively, a nasopharyngeal swab specimen may be collected and placed in a viral transport medium (VTM) for direct specimen testing. Pharyngeal samples submitted in viral transport medium will be processed for direct specimen testing but are not recommended due to their poor sensitivity.

**You can easily monitor influenza activity throughout the season**
The Epidemiology and Prevention Branch in the Influenza Division at CDC collects, compiles and analyzes information on influenza activity year round in the United States and produces a weekly report from October through mid-May. Information in these five categories is available at [http://www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/): 1. find out where and when influenza activity is occurring 2. track influenza-related illness 3. determine what influenza viruses are circulating 4. detect changes in influenza viruses 5. measure the impact influenza is having on deaths in the United States.

IRL - WORKING TOGETHER TO HELP THE HOMELESS

The administrative team and employees at Integrated Regional Laboratories have successfully volunteered and organized fundraising efforts to aid the homeless in Broward County for almost three years. Specifically, IRL has partnered with the Broward Partnership for the Homeless (BPHI) located in Fort Lauderdale, Florida in this effort.

Broward Partnership for the Homeless has been in existence since 1998 and has 200 residents at all times, including families, single men and single women. The property stands on three acres, is over 50,000 square feet in size, and contains a medical clinic. It also includes three dormitories with a total of 180 beds. BPHI offers its residents training on computers, resume writing and basic financial guidelines to aid them once out on their own.

In addition to sponsoring and preparing lunch for BPHI, IRL has conducted numerous clothing and hygiene product drives for the homeless shelter and continues to host donation drives periodically throughout the year. In October 2007, IRL was also recognized at the shelter’s annual “Breakfast of Champions” for generous volunteer efforts throughout the year.

Joanne Trout, IRL’s Chief Executive Officer comments, “IRL recognizes its responsibility to give back to the community. Our partnership with Broward Partnership for the Homeless allows us to extend ourselves to those who are making a real effort to improve their own situation. Everyone needs a helping hand now and then and we are proud to help.”

If your office team would like to engage in helping the homeless, please contact DonnaLee Minott, Volunteer Coordinator at BPHI, 954-779-7673.
FLOW CYTOMETRY AT IRL

Flow cytometry is a technique for counting, examining, and sorting microscopic particles suspended in a stream of fluid. It allows simultaneous analysis of the physical and/or chemical characteristics of single cells flowing through an optical and/or electronic detection apparatus. The properties measured include a particle’s relative size, relative granularity or internal complexity, and relative fluorescence intensity after the cells are tagged with a fluorescent marker.

At IRL Flow Cytometry is used with whole blood to measure CD4 and CD8 cells which are white blood cells associated with the regulation and containment of infection. These cells are usually measured in HIV infections to assess the efficacy of the medical intervention for a particular patient. The higher the blood content of the CD4 and CD8 cells, the better the prognosis for containment of the infection.

The following profiles are performed Monday through Friday on a fresh lavender top specimen:

- **30900 Helper T Cell**: CD4 % and absolute count mcL
- **30898 Helper/Suppressor**: CD4 and CD8 % and absolute counts plus H/S ratio
- **30899 T/B Cell Profile**: CD4, CD8, NK (Natural Killer), and CD19 (B cells) % plus absolute counts and H/S ratio

In the near future, IRL will use this technique to assist in the diagnosis of patients who may have certain types of leukemia by assessing the presence or absence of specific white blood cells associated with leukemia.

We value your patients’ TIME...

Attention Broward Physicians:
Send your patients with lab orders to our Patient Service Center located inside University Hospital
7201 N. University Drive
Tamarac, FL 33321
Phone: 954-726-6255
Hours: Mon - Fri
7:30am - 4:30pm

**AUTOFAX REPORTING vs. HAND DELIVERY OF REPORTS**

AUTOMATED EARLY MORNING REPORT DELIVERY IS AVAILABLE!
Help us serve you and your patients better and do our part for the environment!

By switching to automated fax delivery for your lab reports you will receive your patients’ results much faster than having your reports delivered by our IRL couriers. We will also be able to decrease the number of miles driven by our vehicles, reducing greenhouse gas emissions.

Please call IRL Client Services at (954) 777-0018 x 501 and ask your representative to set up your account to receive fax results automatically. We will arrange for one or more fax times convenient for your office operations. Call TODAY!

Thank you for using IRL for all your testing needs. We are committed to providing the right information, in the right hands, at the right time, every time…and doing our part to minimize our impact on the environment.

**Have a “Green Day!”**