TARRANT

The **A**lberta **R**ecording and **R**ese**A**rch **N**e**T**work
Tracking Influenza in Alberta

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Newsletter
April 2007

Inside this issue:

Annual TARRANT Conference

Tarrant hosted its annual meeting this year on March 24 2007 in Calgary. Twenty-four people attended, to hear presentations from senior personnel, researchers, and sentinel from Alberta Health and Wellness, Alberta Provincial Laboratory, British Columbia Centre for Disease Control (BCCDC), Sentinel Family Physician Network, and the Calgary Health Region.

Dr. Jim Dickinson described the origins of the program and its growth. This flu season has been light: the rates of Influenza Like Illness (ILI) visits were lower than average. 75% of strains identified by the TARRANT network were Type A H1N1 (A/New Caledonia-like) the others Type A H3N2 A/ Wisconsin/67/05-like, thus matching the vaccine.

Dr. Henry Quaye, one of our long-standing sentinels from Edson, shared his personal experience with the Tarrant network. His initial interest about the program began with Mike Tarrant, and he finds it valuable as a sentinel to collect this information to detect outbreaks and monitor the rates and strains within the community. He described a classic example of how influenza arrives and spreads, A patient who travelled from Reno and fell ill was sampled, but, unaware that he had influenza, then travelled to somewhere in Mexico thus potentially infecting a whole planeload of others within a short period of time. He discussed the logistics of participating in the Tarrant program and how easy it is with help from his nurse. He has found it valuable to obtain swabs from patients

Left:Dr. Woodruff & Dr. Dickinson

presenting with even mild cases of influenza like illness symptoms, because these patients may also have the virus.

Larry Svenson from Alberta Health and Wellness described influenza surveillance using physician claims data. This administrative data collected for billing purposes is used by the province to monitor trends in influenza cases diagnosed by general practitioners, and from emer-

More highlights of the meeting…

around the world. For the future, he is thinking how to repackage this information to be useful for pandemic influenza planning and monitoring.

Dr. Kevin Fonseca, Clinical Virologist from the Alberta Provincial Lab showed how laboratory data can be used for influenza pandemic planning. Current molecular assays used by the provincial lab are sensitive, accurate and can identify new subtypes. These tests have the ability to detect non viable virus up to seven days after flu onset. However, live virus growth is necessary to detect antiviral resistance. Data collected by the Tarrant sentinels are essential for identifying new subtypes of the virus. The laboratory also is now able to detect other viruses, notably metapneumovirus and respiratory syncitial virus. Dr. Fonseca stressed the importance of collecting swab samples from the young age group (<5 years old) to provide a more accurate picture of what is occurring within this group. Even for these, Dr. Fonseca and many physicians agreed that the

new nasopharyngeal swabs are the preferred method for obtaining specimens because they are so easy to use, and cause less distress than pharyngeal swabs.

Dr. Chris Bockmuehl, Division Chief of Community Family Medicine in the Calgary Health Region, described pandemic planning for community offices.

Identifying patients with likely clinical presentation of influenza before they arrive, proper triaging of suspected cases, and training staff and using office planning tools might minimize virus transmission to other patients and staff.

Confusion in the Lab!

Attention: TARRANT lab requisition forms are only for respiratory samples of ILI !!!

Over the last few months, the Provincial Lab has been receiving some TARRANT requisition forms for non-respiratory viral testing (eg. Genital swabs). This has caused some confusion in the lab and we remind you to use the standard provincial lab virology requisitions for non-respiratory viral testing.

Some Interesting Tools and Guidelines for Your Practice

The Calgary Health Region developed a pandemic planning tool for community physicians that is available at

(**http://www.calgaryhealthregion.ca/familymedicine/pdfs/pandemic_preparedness_june06.pdf**)

Pandemic-preparedness tools for the community office [1]

http://www.cfpc.ca/cfp/2006/oct/vol52-oct-fpwatch-bockmuehl.asp

Controlling droplet-transmitted respiratory infections: best practices and cost. [2]

Vincent Lam,, winner of the Giller prize for his book about being a medical student, and doctor, also wrote a useful book, "**The Flu Pandemic and You".** [3]

References:

1 .Tink W, Nijssen-Jordan, C, , C B. Making it relevant: Pandemic-preparedness tools for the community office. Can Fam Phys. 2006;6:1270-2.

2. Hogg W HP. Controlling droplet-transmitted respiratory infections: best practices and cost. . Can Fam Physician. 2006;52:1229-32.

3. Lam Vincent L, Colin The Flu Pandemic and You: Doubleday Canada; 2006.

More highlights of the meeting…..

Elaine Sartison discussed progress of the Alberta Immunization program. Alberta purchased 800 000 doses of the vaccine in 2006/07 season to distribute and administer to high risk groups. Currently, 60% of health care workers and 60% of children between 6-23 months of age are vaccinated and the province is striving to increase those percentages to at least 90% within the next few years. Seventy percent of people under 65 years of age with a chronic health condition were vaccinated while the vaccination rate in long term care facilities was 92% in 2005-2006. There was discussion about the difficulty of getting the right balance: trying to gain maximum efficiency in distribution, and accountability for not wasting doses, against making the process and record keeping too burdensome for front line staff.

Dr.Danuta Skowronski, from the British Columbia Centre for Disease Control provided highlights of the Vaccination Effectiveness Study which uses data collected by our sentinel surveillance network. Vaccine effectiveness estimates are highly variable due to virus drift, vaccine reformulation, outcomes measured and methods used. Therefore she devised the project we participate in now. This allows us to link the epidemiological data collected by sentinels to laboratory data. So far this year, Alberta has contributed well to the whole project. Because there is a good match between the vaccine and the circulating strains we will have a good chance of demonstrating how effective the vaccine is. She is enrolling more provinces, and when we have larger sample sizes, we will be able to also examine subgroups including different age groups. This will allow better estimation of the benefits of the vaccination program and can inform vaccine reformulation. The study has received more funding for next yea so we anticipate this vaccine effectiveness monitoring will continue within our sentinel network next fall.

Presentation by Dr.Danuta Skowronski

Recommendations for better research program are:

1. Increase sample size and power to allow for age sub group analyses.

2. Sample an equal population of vaccinated and non-vaccinated (increase the elderly population)

3. Collect information on confounders (ex. ILI severity, effect of repeat immunization)

4. Need for close collaboration with epidemiology and labs

5. Incorporate gene sequencing into routine surveillance

6. Obtain more dedicated funding

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Update on Vaccine Effectiveness Study

We thank all sentinels this season for your dedication in collecting results for the Vaccination Effectiveness Study. This study will finish for this season at the end of April, so $10 incentive for every swab taken will cease then. However, it is still important to continue collecting routine ILI data during the spring and summer season to monitor the influenza rate within Alberta and detect outbreaks. Next season, we expect the study to continue and incentives will be provided again.

PAYMENTS!

You should receive your payments for the first pay period (November 1 2006 to February 6 2007) before the end of April. Sentinels who have not filled out the invoice sheet yet, we will receive the form in May for the entire season. We cannot make up your cheque until you (or your staff) fill this out The last pay period will cover the February 7 2007 to April 30 2007 and any payment owing will be sent out by the end of May.

Conclusion of the Meeting

Overall, the people present agreed that it was a worthwhile day, and assisted each of the different participating groups to meet the others.

Besides sentinels, the workshop included representatives from the Provincial Laboratory staff, public health officers, immunizations staff, and sentinels. The Chief Medical Officer of the Calgary Health region, Dr Brent Friesen was impressed by the program and stated the he will try to provide a kit for every sentinel in this region to protect against droplet transmission as we take samples. We will be negotiating with him to ensure this is available in the fall for all sentinel practices, and will try to convince other health regions to do the same: thus providing amore tangible benefit for sentinel practitioners.

Just in case you missed our meeting, some of our presenters have agreed to post their slides on our website. Feel free to check them out!

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