



STAFF REPORT ACTION REQUIRED

Influenza Immunization Rates of Healthcare Workers in Toronto Healthcare Facilities

Date:	June 7, 2012
To:	Board of Health
From:	Medical Officer of Health
Wards:	All
Reference Number:	

SUMMARY

This is the third of three annual reports requested by the Board of Health on influenza immunization coverage rates among healthcare workers (HCWs) in Toronto healthcare facilities.

Influenza is a highly contagious acute viral infection of the respiratory tract which causes annual outbreaks and periodic worldwide epidemics. Annual immunization of persons at high risk, HCWs and others who are capable of transmitting influenza to those at high risk, is the most effective measure for reducing the impact of influenza. Annual influenza immunization of HCWs is recommended by a number of organizations including the National Advisory Committee on Immunization (NACI).ⁱ

In order for immunization programs to be successful, high rates of coverage are required. However, influenza immunization coverage rates among HCWs in Toronto and Ontario remain low despite targeted efforts to increase them. In response to these low rates, Toronto Public Health (TPH) developed the Containment Challenge campaign to encourage Toronto hospitals and long-term care homes (LTCHs) to improve their influenza immunization rates for the 2011/2012 influenza season.

For the 2011/2012 influenza season, HCW influenza immunization coverage rates increased by a small to moderate amount for all facility types, however these rates are consistent with rates that have been previously reported and may represent a normal variation in the rates. Regardless of this increase, Toronto HCW influenza immunization rates remain unacceptably low.

RECOMMENDATIONS

The Medical Officer of Health recommends that:

1. the Board of Health Chair write to the CEOs and Boards of Toronto healthcare facilities urging them to develop and implement institutional policies regarding mandatory influenza immunization of healthcare workers, in consultation with worker representatives.
2. the Medical Officer of Health continue to report annually to the Board of Health on influenza immunization coverage rates of healthcare workers in Toronto healthcare facilities as part of the annual update on influenza.
3. the Medical Officer of Health work with Toronto healthcare facilities with healthcare workers influenza immunization coverage rates in the lowest quintile to develop a plan to increase coverage rates in 2012-2013.

Financial Impact

There are no financial implications arising from this report.

DECISION HISTORY

At the meeting of the Board of Health on October 19, 2009, the Medical Officer of Health reported on influenza immunization rates of HCWs in Toronto healthcare facilities for the 2008/2009 flu season. These rates were identified as generally low and therefore recommendations were made for a concerted effort to improve them.

The Board of Health requested the Medical Officer of Health to provide annual updates on influenza immunization coverage rates among HCWs in Toronto healthcare facilities for the next three years. This is the third of these three annual reports.

The Board of Health urged the CEOs of acute care hospitals, complex continuing care hospitals, LTCHs, and nursing agencies to provide a comprehensive program to promote annual influenza immunization of HCWs.

The Board of Health also made recommendations to the Ontario Minister of Health and Long-Term Care to include annual institutional HCW influenza immunization rates as an indicator within the publicly reported Ontario Patient Safety Initiatives, and to explore options to make annual influenza immunization mandatory for HCWs if coverage rates for healthcare facilities do not improve over the next three years.

At the meeting of the Board of Health on June 1, 2010, the Medical Officer of Health reported on influenza immunization rates of HCWs in Toronto healthcare facilities for the 2009/2010 influenza season. The 2009/2010 flu season was a "different" influenza season, with both a seasonal influenza vaccine and a separate pH1N1 vaccine. The uptake of the pH1N1 influenza vaccine among HCWs in acute care and complex continuing care

remained generally low and was comparable to rates reported for seasonal influenza vaccine in previous seasons; uptake was even lower in LTCHs. Coverage rates for the seasonal influenza vaccine, which was offered later in the season, were much lower than reported in previous influenza seasons.

The Board of Health requested the Ontario Minister of Health and Long-Term Care take proactive measures to increase influenza immunization coverage rates for healthcare institutions; and, if coverage rates do not improve significantly, to consider other measures, including mandatory immunization for some categories of HCWs. In addition, the Board made a recommendation for consultation with the stakeholders in the healthcare sector, particularly the long-term care sector, including the unions in the sector.

At the meeting of the Board of Health on June 7, 2011, the Medical Officer of Health reported on influenza immunization rates of HCWs in Toronto healthcare facilities for the 2010/2011 influenza season. Median influenza immunization coverage rates continued to remain low among HCWs in Toronto acute care facilities, complex continuing care facilities, and LTCHs. Overall, LTCHs achieved the highest rate. The coverage rates in Toronto acute care and complex continuing care facilities were below Ontario rates, while the LTCH rates are comparable to Ontario rates.

The Board of Health requested the Medical Officer of Health report back on a plan to increase immunization rates among health care workers for the coming influenza season; policy options for mandatory influenza immunization, at the same time as results of the three-year reviews are reported on; and that any consideration of mandatory measures include consultation with employee groups, in an effort to respect both community and individual rights.

At the meeting of the Board of Health on October 17, 2011, the Medical Officer of Health reported back on plans to increase immunization rates among HCW for the 2011-2012 influenza season.

ISSUE BACKGROUND

Influenza is a highly contagious acute viral infection of the respiratory tract which causes annual seasonal outbreaks and periodic worldwide pandemics. Influenza transmission and outbreaks in hospitals^{ii, iii, iv, v, vi} and LTCHs^{vii, viii, ix} are well documented and can result in significant patient, resident and staff morbidity and mortality. In Toronto, an average of 43 (ranging from 5 to 103) seasonal influenza outbreaks are reported each year from acute care hospitals, complex continuing care hospitals, and LTCHs. The increased risk of influenza to residents and patients in these facilities is related both to their advanced age and underlying health problems, as well as the setting, in which they are cared for in close proximity and have close contact with a range of HCWs. HCWs can acquire influenza from patients and the community and then may readily transmit infection to other patients, other HCWs, and their family members.

With a good match between influenza strains in the vaccine and circulating strains, influenza vaccination has been shown to prevent influenza illness in approximately 70% to 90% of healthy children and adults and in about 50% of the elderly.^x When there is a significant difference between circulating and vaccine influenza strains, influenza vaccination has been shown to prevent influenza illness in about 30% to 60% of healthy children and adults, and is still recognized as the most effective way to protect against influenza infection.^{xi} Serious adverse reactions associated with the influenza vaccine are rare.^{xii} Annual influenza immunization of HCWs is recommended by the National Advisory Committee on Immunization (NACI).^{xiii} In the Mandatory Health Programs and Service Guidelines (1997), the Ontario Ministry of Health and Long-Term Care (MOHLTC) had suggested a target annual facility-wide influenza immunization coverage rate of 70% for HCWs in facilities. In 2009, these guidelines were replaced by the Ontario Public Health Standards which do not provide a specific influenza immunization target for HCWs. A target coverage rate for HCW influenza immunization has not been set, however mandatory vaccination policies in some United States healthcare facilities demonstrate that coverage rates of greater than 90% are achievable. Research suggests that vaccination of every additional HCW protects an additional fraction of patients.^{xiv}

Influenza vaccine is provided at no cost to the staff of hospitals and LTCHs in Ontario through the provincial Universal Influenza Immunization Program. Under provincial protocols, LTCHs and public hospitals are required to report their HCW influenza vaccination coverage rates each year as of November 15th to the local Medical Officer of Health by December 1st. The rates are then reported to the MOHLTC by local health units.

2011-2012 Influenza Season

The 2011/2012 Northern Hemisphere influenza vaccine contained the following strains recommended by both the World Health Organization and the National Advisory Committee on Immunization: A/California/7/2009 (H1N1)-like, A/Perth/16/2009 (H3N2)-like and B/Brisbane/60/2008 (Victoria lineage)-like antigens.^{xv}

Since the beginning of this influenza season (August 28, 2011), the National Microbiology Laboratory (NML) tested 1,202 influenza viruses that were received from provincial laboratories across the country and found that there was a good match between this season's influenza A vaccine components and the circulating influenza A viruses in Canada.^{xvi} However, just under half of the circulating influenza B viruses were found to be a good match with the influenza B component in this year's vaccine.^{xvii}

Compared to the previous ten years of influenza activity tracked through surveillance data (2001/2002 to 2010/2011), the 2011/2012 season was slow to start and peaked later than usual. Four of the previous ten years reported more lab-confirmed cases than the 998 reported this season (as of May 19, 2012). The 28 institutional outbreaks detected for the current season was on the low side with only three years reporting fewer outbreaks: 2002/2003 (5), 2008/2009 (15), and 2009/2010 (10).

COMMENTS

Influenza Vaccine Availability and Distribution to Toronto Healthcare Facilities

Each year TPH staff offer influenza immunization education sessions and materials for HCWs in all Toronto acute care, complex continuing care, and LTCHs.

In order to promote influenza immunization, some healthcare facilities have had some success with the use of multi-faceted immunization campaigns, including strategies such as incentives, stickers for staff ID badges to indicate receipt of vaccine, mobile influenza vaccination carts, evening and weekend access to immunization, and strong support/championing by senior leadership.

Efforts to Increase 2011/2012 HCW Influenza Immunization Rates

At the October 7, 2011 meeting of the Board of Health, the Medical Officer of Health reported on efforts to increase immunization rates among HCWs in Toronto healthcare facilities. The strategy for the 2011/2012 season included:

- A social marketing campaign called the “Containment Challenge” targeting HCWs that included the development of a specific page on TPH’s Health Professionals website, a video, a poster, and readymade inserts for facility newsletters. The material was downloadable from the website and also included social media engagement strategies (i.e., Twitter and Facebook). The campaign was launched via a letter to the CEOs of all Toronto healthcare facilities and Local Health Integration Network inviting them to participate in a recognition event (i.e., awards for facilities with the highest HCW influenza immunization rates and those with the most improved rates for each of the three facility categories – acute care, complex continuing care, and LTCH).
- The Medical Officer of Health wrote a letter to the heads of the College of Physicians and Surgeons of Ontario, the Ontario College of Nurses, the Ontario Medical Association, and the Registered Nurses’ Association of Ontario asking that they send a strong and clear message to their membership recommending annual influenza immunization.
- The November Influenza Surveillance Alert, which was sent to Toronto physicians to advise them that the influenza season had commenced, included a reminder for them to receive their influenza immunization.
- An article entitled “Improving HCWs Influenza Immunization Rates” was published in the October 2011 issue of the *Communiqué* newsletter for physicians.
- Dr. Barbara Yaffe advocated with the MOHLTC to include an emphasis on the importance of influenza immunization of HCWs in their upcoming influenza immunization campaign.

Addition of January 15, 2012 HCW Influenza Immunization Rates

Many healthcare facilities continue their HCW influenza immunization programs after the November 15 reporting deadline. This date was chosen by the MOHLTC to ensure that in a season when influenza viruses start circulating early, staff will be protected. However, facilities may not receive the vaccine shipment until mid-late October. At the request of these facilities, TPH has collected rates a second time, as of January 15, 2012, and included them in this report. These rates were not reported to the MOHLTC and were not used for the Containment Challenge. Although the median rates increased somewhat, they remain low and the MOHLTC remains firm on their reporting timeline.

Nevertheless, approximately 3,500 additional HCW were immunized between November 15, 2011 and January 15, 2012 and facilities should continue to offer vaccine after the provincial deadline.

Influenza Immunization Coverage Rates in Toronto Healthcare Facilities

Although 2011/2012 HCW influenza immunization rates increased for all facility types (i.e., acute care, complex continuing care, and LTCHs), the rates are consistent with rates that have been reported in previous seasons and remain less than optimal.

In 2011/2012, the median influenza immunization coverage rate among HCWs in Toronto was 48% (ranging from 25% to 67%) for acute care facilities, 60% (ranging from 21% to 87%) for complex continuing care facilities, and 72% (5% to 100%) among LTCHs (See Tables 1a, 1b, and 1c, and Figure 1).

For acute care facilities, the 2011/2012 rate is higher than rates from the previous four seasons with the exception of 2009/2010 which achieved a rate of 58%.

For complex continuing care facilities, the 2011/2012 coverage rate is higher than rates from the previous four seasons however the rate is only negligibly higher than two of those seasons (55% in 2008/2009, 59% in 2009/2010).

For LTCHs, the 2011/2012 coverage rate is also higher than rates from the previous four seasons, however the rate is only negligibly higher than two of those seasons (66% in 2007/2009, 70% in 2008/2009).

Unfortunately, median rates for Ontario HCWs are not yet available for the 2011/2012 season as this surveillance function is currently in transition from the MOHLTC to Public Health Ontario. As a result, it is not yet possible to compare 2011/2012 Toronto rates with Ontario rates. However, historically Toronto rates have consistently been lower than provincial rates. Overall, HCW influenza immunization rates in Greater Toronto Area health units increased in the 2011/2012 influenza season when compared to the previous season.

A detailed breakdown of HCW influenza immunization rates by Toronto healthcare facility for both November 15, 2011 and January 15, 2012 is provided in Tables 2a, 2b, and 2c.

Table 1a: Healthcare Worker Influenza Immunization Coverage Rates by Influenza Season and Vaccine Type, Toronto and Ontario, 2007/08 - 2011/12

Acute Care Facilities

Influenza Season and Vaccine Type	Toronto		Ontario
	N*	Median Rate (Range)	Median Rate
2007/08 Seasonal	17	40% (17% to 62%)	50%
2008/09 Seasonal	18	42% (24% to 63%)	51%
2009/10 pH1N1	18	58% (40% to 99%)	65%
2010/11 Seasonal	18	37% (14% to 65%)	42%
2011/12 Seasonal	18	48% (25% to 67%)	NA

*Count of institutions submitting rates to TPH for November 15, 2011. NA: Not available at the time of this report.

Table 1b: Healthcare Worker Influenza Immunization Coverage Rates by Influenza Season and Vaccine Type, Toronto and Ontario, 2007/08 - 2011/12

Complex Continuing Care Hospitals

Influenza Season and Vaccine Type	Toronto		Ontario
	N*	Median Rate (Range)	Median Rate
2007/08 Seasonal	17	38% (23% to 80%)	50%
2008/09 Seasonal	16	55% (20% to 80%)	51%
2009/10 pH1N1	16	59% (37% to 85%)	65%
2010/11 Seasonal	16	38% (17% to 80%)	42%
2011/12 Seasonal	16	60% (21% to 87%)	NA

*Count of institutions submitting rates to TPH for November 15, 2011. NA: Not available at the time of this report.

Table 1c: Healthcare Worker Influenza Immunization Coverage Rates by Influenza Season and Vaccine Type, Toronto and Ontario, 2007/08 - 2011/12

Long-Term Care Homes

Influenza Season and Vaccine Type	Toronto		Ontario
	N*	Median Rate (Range)	Median Rate
2007/08 Seasonal	77	66% (19% to 98%)	77%
2008/09 Seasonal	84	70% (19% to 98%)	77%
2009/10 pH1N1	85	38% (0% to 97%)	51%
2010/11 Seasonal	81	58% (8% to 98%)	58%
2011/12 Seasonal	73	72% (5% to 100%)	NA

*Count of institutions submitting rates to TPH for November 15, 2011. NA: Not available at the time of this report.

Figure 1: Median staff influenza immunization coverage rates by facility type and season. Toronto, 2007/08 to 2011/12

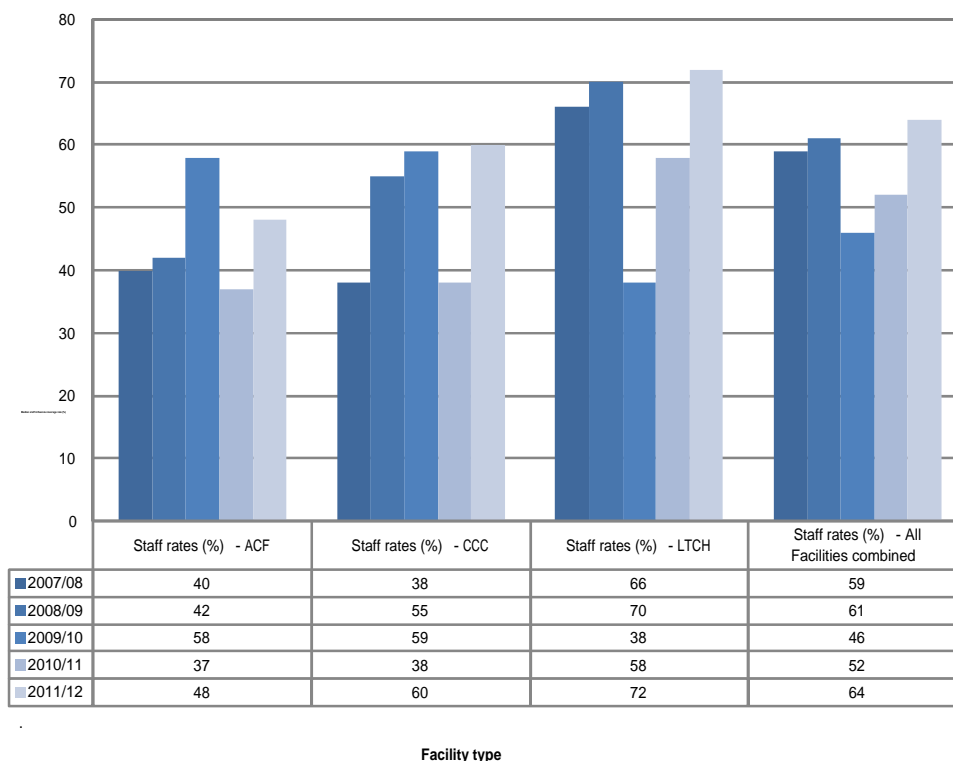


Table 2a: Health Care Worker Influenza Immunization Coverage Rates by Acute Care Facility, Toronto, 2011/12.

Acute Care Facility	Nov 15, 2011 reporting date			Jan 15, 2012 reporting date		
	Total Staff	# Staff Immunized	Staff Coverage Rate (%)	Total Staff	# Staff Immunized	Staff Coverage Rate (%)
University Health Network – Toronto Western Hospital	2570	1727	67	2570	1742	68
University Health Network – Princess Margaret Hospital	2947	1967	67	2947	1979	67
University Health Network – Toronto General Hospital	6596	4367	66	6596	4408	67
The Scarborough Hospital – Grace Division	1019	636	62	1019	690	68
North York General Hospital – Branson Division	136	76	56	133	76	57
The Hospital for Sick Children	7109	3894	55	7109	4005	56
The Scarborough Hospital – General Division	2039	1066	52	2039	1148	56
Sunnybrook Health Sciences Centre	6345	3171	50	6365	3255	51
Mount Sinai Hospital	5151	2506	49	5151	2751	53
St. Michael's Hospital	5400	2589	48	5400	2625	49
North York General Hospital – General Division	2343	1089	46	2343	1100	47
St. Joseph's Health Centre	2288	1030	45	2288	1039	45
Women's College Hospital	621	273	44	621	273	44
Trillium Health Centre	3530	1545	44	3530	1617	46
Toronto East General Hospital	2324	879	38	2324	906	39
Humber River Regional Hospital	2876	817	28	2876	841	29
William Osler Health Centre, Etobicoke General Hospital	1371	389	28	1371	400	29
Rouge Valley Centenary Hospital	2278	564	25	2278	596	26

Table 2b: Health Care Worker Influenza Immunization Coverage Rates by Complex and Continuing Care Facility, Toronto, 2011/12

Complex and Continuing Care Facility	Nov 15, 2011 reporting date			Jan 15, 2012 reporting date		
	Total Staff	# Staff Immunized	Staff Coverage Rate (%)	Total Staff	# Staff Immunized	Staff Coverage Rate (%)
McCall Centre for Continuing Care	150	130	87	150	133	89
Runnymede Healthcare Centre	250	199	80	270	217	80
Bridgepoint Hospital	953	706	74	953	719	75
West Park Healthcare Centre	873	605	69	873	605	69
Providence Healthcare Hospital	825	565	68	824	602	73
Toronto Rehabilitation Institute – Bickle Centre (Queen Elizabeth Centre)	471	301	64	471	319	68
Toronto Rehabilitation Institute – Lyndhurst Centre	273	166	61	273	172	63
Salvation Army Toronto Grace Health Centre	211	127	60	215	152	71
St. John's Rehabilitation Hospital	458	275	60	449	283	63
Toronto Rehabilitation Institute – University Centre	660	392	59	660	395	60
Toronto Rehabilitation Institute – Rumsey Centre	112	66	59	112	67	60
Toronto Rehabilitation Institute – Hillcrest Centre	184	107	58	184	108	59
Holland Bloorview Kids Rehab Hospital	1051	591	56	1059	627	59
Baycrest Hospital C.C.C.	1315	630	48	1315	654	50
Centre for Addiction & Mental Health - College St. Site	1020	409	40	1020	454	45
Centre for Addiction & Mental Health - Queen St. Site	1961	411	21	1961	437	22

Table 2c: Health Care Worker Influenza Immunization Coverage Rates by Long-Term Care Home, Toronto, 2011/12

Long-Term Care Home	Nov 15, 2011 reporting date			Jan 15, 2012 reporting date		
	Total Staff	# Staff Immunized	Staff Coverage Rate (%)	Total Staff	# Staff Immunized	Staff Coverage Rate (%)
Mon Sheong Home for the Aged (Downtown)	123	123	100	123	123	100
Rose of Sharon Korean Long Term Care	90	90	100	90	90	100
Mon Sheong Scarborough Long Term Care Centre	205	204	100	209	208	100
Yee Hong Centre for Geriatric Care – McNiccoll Site	320	316	99	320	316	99
Yee Hong Centre for Geriatric Care – Scarborough Finch Site	273	265	97	273	266	97
Garden Court Nursing Home	43	41	95	43	41	95
Elm Grove Living Centre Inc.	108	102	94	108	102	94
Leisureworld Caregiving Centre – Cheltenham	174	161	93	180	170	94
Ehatare Nursing Home	48	44	92	48	43	90
Extendicare – Scarborough	182	166	91	182	168	92
Norwood Nursing Home	70	63	90	70	63	90
Leisureworld Caregiving Centre – St. George	236	208	88	236	218	92
Maynard Nursing Home	86	75	87	86	81	94
Tony Stacey Centre for Veteran's Care Home for the Aged	115	99	86	115	114	99
Leisureworld Caregiving Centre – Rockcliffe	226	193	85	226	212	94
Kennedy Lodge Nursing Home	300	256	85	300	265	88
Hellenic Home for the Aged – Scarborough	147	125	85	147	135	92
Craiglee Nursing Home – Scarborough	215	181	84	220	194	88
Dom Lipa Nursing Home – Etobicoke	102	85	83	104	85	82
Leisureworld Caregiving Centre – Etobicoke	180	148	82			
Kensington Gardens	390	315	81	390	319	82
Leisureworld Caregiving Centre – Altamont	168	135	80	168	135	80
Thompson House	123	97	79	123	102	83
Fudger House	247	194	79	247	196	79
Chester Village	250	196	78	268	214	80
Extendicare – Rouge Valley Nursing Home	227	173	76	224	195	87
Castleview Wychwood Towers	418	317	76	418	328	78
Belmont House	217	163	75	215	169	79
Tendercare Living Centre – Scarborough	317	238	75	311	274	88
Vermont Square	160	120	75	160	130	81
The Wexford	230	171	74	231	172	74
Leisureworld Caregiving Centre – Ellesmere	251	183	73	251	230	92
Providence Long Term Care Home	268	195	73	261	202	77
Sunnybrook Veterans Centre	675	491	73	672	512	76
Wellesley Central Place	150	109	73	160	123	77
Leisureworld Caregiving Centre O'Connor Court	167	121	72	167	126	75
Wesburn Manor	217	157	72	218	160	73
Fairview Nursing Home	102	72	71	104	91	88
Bendale Acres	309	218	71	309	241	78
St. Clair O'Connor Community Nursing Home	67	47	70	67	51	76
Christie Gardens Apartments & Care	125	87	70	121	93	77
True Davidson Acres	233	162	70	233	172	74
The O'Neill Centre	211	145	69	209	177	85
Suomi Koti Nurisng Home Toronto	75	51	68	75	51	68
Leisureworld Caregiving Centre – Norfinch	193	126	65	187	147	79
Leisureworld Caregiving Centre – Scarborough	326	210	64	326	234	72
Main Street Terrace (Revera)	170	105	62	170	105	62
West Park Long Term Care Centre	234	142	61	234	160	68
North York General Hospital – Senior's Health Centre	204	123	60			
Shepherd Lodge Nursing Home	310	185	60	310	198	64

Table 2c: Health Care Worker Influenza Immunization Coverage Rates by Long-Term Care Home, Toronto, 2011/12
(cont'd from previous page)

Long-Term Care Home	Nov 15, 2011 reporting date			Jan 15, 2012 reporting date		
	Total Staff	# Staff Immunized	Staff Coverage Rate (%)	Total Staff	# Staff Immunized	Staff Coverage Rate (%)
Seven Oaks	292	165	57	291	178	61
Casa Verde Health Centre	240	135	56	240	145	60
Leisureworld Caregiving Centre – O'Connor Gate	185	103	56	167	84	50
Extendicare – Bayview	257	142	55	251	161	64
The Village of Humber Heights	232	126	54	232	154	66
Nisbet Lodge	130	70	54	132	75	57
Lakeside Long Term Care Centre	180	96	53	178	146	82
Drs. Paul and John Rekal Centre	125	64	51	125	69	55
Baycrest Hospital - Apotex Centre (LTCH)	1102	556	50	1102	596	54
Eatonville Care Centre	290	145	50	280	201	72
The Heritage Nursing Home	250	116	46	250	124	50
Trilogy Long Term Care Centre	210	91	43	210	103	49
Cedarvale Terrace Long Term Care Home	249	107	43	249	169	68
Central Park Lodge Westside	242	102	42	243	103	42
Hawthorn Place Care Centre (Previously Yorkview Lifecare Centre)	253	105	42	269	163	61
North Park Nursing Home	101	34	34	101	38	38
Extendicare – Guildwood	251	83	33	232	181	78
Ivan Franko Home – Etobicoke	85	24	28	85	24	28
Villa Colombo	485	136	28	485	240	49
The Gibson Long Term Centre	257	66	26	257	90	35
Ina Grafton- Gage Home	150	20	13	148	75	51
Valley View Residence	207	16	8	208	38	18
Labdara Lithuanian Nursing Home	130	6	5	130	12	9
†Hellenic Home Care for the Aged – Toronto				97	89	92
†The Westbury				220	177	80
†Carefree Lodge				154	122	79
†Isabel & Arthur Meighen Health Centre				211	165	78
†Lakeshore Lodge				190	147	77
†Cummer Lodge				414	257	62
†Harold & Grace Baker Centre				200	118	59
†Kipling Acres				323	180	56
†White Eagle Nursing Home				68	38	56
†Leisureworld Caregiving Centre – Lawrence				226	67	30
†Humber Valley Terrace				150	42	28
†Copernicus Lodge				325	60	18
†Ukrainian Canadian Care Centre – North York				225	15	7

†Institution did not submit 2011/12 seasonal influenza data to Toronto Public Health by November 15, 2011 deadline

TPH staff influenza immunization rates are routinely collected for staff who enter healthcare facilities as part of their work, including staff in the Dental and Oral Health Program, the Communicable Disease Liaison Unit, and the Control of Infectious Diseases and Infection Control program. In the 2011/2012 influenza season, 54% of these staff received the seasonal influenza vaccine. This rate is unchanged from the 2010/2011 influenza season.

Results of the Containment Challenge

Nine facility winners were identified for the Containment Challenge. CEOs for these organizations have been invited to attend the June 25, 2012 Board of Health meeting to receive their awards.

The six winners for highest HCW influenza immunization rates as of November 15, 2011 are:

Acute Care Facilities

- University Health Network, Princess Margaret Hospital – 67%
- University Health Network, Toronto Western Hospital – 67%

Complex Continuing Care Facility

- McCall Centre for Continuing Care – 87%

Long-Term Care Homes

- Mon Sheong Home for the Aged – 100%
- Mon Sheong Scarborough Long Term Care Centre – 100%
- Rose of Sharon Korean Long Term Care – 100%

Most improved influenza immunization rates were calculated by comparing rates from November 15, 2010 to rates from November 15, 2011. The three winners for most improved influenza immunization rate are:

Acute Care Facility

- North York General Hospital, Branson Site – 56%, an increase of 18%

Complex Continuing Care Facility

- Toronto Rehabilitation Institute, Lyndhurst Centre – 61%, an increase of 33%

Long-Term Care Home

- Leisureworld Caregiving Centre Etobicoke – 82%, an increase of 46%

FUTURE DIRECTIONS

There has been a growing trend among American organizations and regulatory agencies recommending that influenza immunization be made a condition of employment for healthcare personnel (HCP). The Society for Healthcare Epidemiology of America (SHEA) has published an updated position paper on this topic and noted "Voluntary vaccination programs have been in place for decades with little evidence for an overall increase in HCP vaccination rates. Furthermore, multifaceted mandatory vaccination programs have been tried and tested and have been found to be the single most effective strategy to increase HCP vaccination rates, with multiple facilities and systems achieving vaccination coverage of more than 95%."^{xviii} Further, the authors of the SHEA position paper state "therefore, for the safety of both patients and HCP, SHEA endorses a policy

in which annual influenza vaccination is a condition of both initial and continued HCP employment and/or professional privileges."^{xix}

TPH has been working with the Canadian Healthcare Influenza Immunization Network (CHIIN), occupational health departments, and interested physicians from several Toronto Academic Health Sciences Network (TAHSN) hospitals to explore ways to increase influenza immunization rates among HCWs in Toronto healthcare facilities. Strategies include awareness campaigns, multi-faceted vaccination programs, and potential implementation of a mandatory HCW influenza immunization policy at the hospital level. The TPH – TAHSN physician subgroup has consulted with the Medical Officer of Health for the North Bay Parry Sound District Health Unit and hospital staff from the North Bay Regional Health Centre to learn about their mandatory influenza immunization policies. While North Bay Regional Health Centre is currently the only hospital in Canada cited to have a mandatory policy, a number of other jurisdictions in Canada are actively considering the adoption of such a policy. In addition, the TPH – TASHN physician subgroup presented on the topic of mandatory HCW influenza immunization to TAHSN CEOs. The TAHSN CEOs have subsequently struck a “Healthcare Worker Influenza Immunization Working Group” to examine all options to increase HCW influenza immunization coverage rates to = 95%, including mandatory immunization.

TPH will undertake the following actions to address sub-optimal rates in HCW in Toronto healthcare facilities, and TPH staff:

HCW in Toronto healthcare facilities

- Follow up with those healthcare facilities with HCW influenza immunization coverage rates in the lowest quintile to develop a plan to increase coverage rates in 2012/2013.
- Incorporate Containment Challenge feedback from Toronto healthcare facilities to develop a social marketing campaign for 2012/2013 influenza season.
- Report on 2011/2012 Ontario median coverage rates and compare with Toronto rates in the fall 2012 Influenza Update to the Board of Health.
- Continue to report to the Board of Health on HCW influenza immunization coverage rates annually as part of the annual influenza update.
- The Medical Officer of Health will participate in the TAHSN Healthcare Worker Influenza Immunization Working Group.

TPH staff

- TPH has approved a strengthened Employee Immunization Policy, which includes recommendations for influenza immunization of all staff who work with clients at risk for influenza-related complications as outlined by NACI.^{xx}
- Complete implementation of the TPH Employee Immunization Policy education program to all staff by June 30, 2012.

CONCLUSION

This is the third of three annual reports on influenza immunization coverage rates among HCW in Toronto healthcare facilities. For the 2011/2012 influenza season, HCW influenza immunization coverage rates increased by a small to moderate amount for all facility types, however these rates are consistent with rates that have been previously reported and may represent a normal variation in the rates. Regardless of this increase, Toronto HCW influenza immunization rates remain unacceptably low.

Although the Containment Challenge was positively received by Toronto healthcare facilities, it is difficult to measure how it contributed to the increase in rates. A comparison of Toronto rates with Ontario rates, when they become available, may assist in answering this question.

A concerted effort to improve HCW influenza immunization rates remains a public health priority.

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