

**Title:** SMHC Employee Immunization Tracking Program

**Authors:** McMahon, Elizabeth, Penalosa, Tricia, Richard-Zurden, Francine

**Affiliation:** Occupational Health Services, Information Systems

**Objectives:** The Occupational Health Service did not have a reliable recall system for updating employee immunization status. Contact tracing post exposure to infectious diseases such as TB or varicella was achieved by manual chart review, a slow, time consuming method. The objectives of this quality initiative were; 1) To ensure that all employees comply with the current immunization recommendations for health care workers as described by the Protocole d'immunisation du Québec. 2) To maintain comprehensive employee immunization records. 3) To reduce the time involved in contact tracing of employees exposed to infectious diseases.

**Methods:** Using the "Protocole d'immunisation du Québec" and the hospital's "Standing Order for Immunization in the Occupational Health Service", a data collection instrument was created by the Occupational Health Services Coordinator. To manage the data collected, a custom designed Access database was created by a technician from Information Systems. A graduate student from McGill was trained to extract the required information from existing dossiers and enter it into the database. In 2004, between July and September, 1937 dossiers were reviewed and the information was entered in the database. A vaccination blitz for employees was held at the Occupational Health Service during the same period.

**Results:** The database contains immunization records, serology results, screening results (PPD tests, color discrimination tests), mask fit-testing results as well as a record of training received (PDSB (lifting) training and OMEGA training). The database produces a printed record for each employee. The database generates a monthly recall list of employees due for follow up at the Occupational Health Service. A variety of lists can be produced to assist managers. For example, the list describing the results of mask fit-testing guides the manager's decision on what type and quantity of mask must be ordered. To ensure that the database accurately reflects the current employee population it is routinely updated as employees join or leave the hospital. The dossiers of employees who leave remain part of the database but with an inactive status that conserves the information while preventing their names from appearing on recall lists. By the end of September 2004, 41% of the 1735 active dossiers were considered complete. To date, 2193 employee dossiers have been verified using the data collection instrument. 1823 dossiers are active and 1175 (64%) are considered complete. Contact tracing for employee exposure to infectious diseases such as TB, varicella and measles which previously took hours to days to complete can now be accomplished in under an hour.

**Conclusion:** This project provided a process for ensuring that all employees are tracked for compliance with current immunization recommendations for health care workers and that accurate, accessible records are maintained. A personalized record is available to each employee. Managers have access to a variety of different lists to assist them in identifying training or mask fit-testing needs. The objective for August 2006 (two years from start date) is to have 80% of all employees "up to date". The time required for contact tracing post exposure to infectious diseases has been dramatically reduced.

**Link with  
Quality of care:**

Health and safety of both healthcare providers and patients is increased by an effective employee immunization program as the risk of transmission of vaccine preventable infectious diseases is reduced. The time required for contact tracing of employees exposed to infectious diseases (TB, varicella, and measles) has been reduced allowing a more timely and efficient assessment for these individuals.

**Contact information:**

Elizabeth McMahon MSc (A), COHN(C), Coordinator of Occupational Health Services, St-Mary's Hospital Center. Tel. (514)345-3511 (ext. 3930)

**Funding:** None