

HUMAN RESOURCES – STAFF ARTICLE PUBLISHED

Recommendation

The Commissioner of Finance & Corporate Services recommends:

That the following report regarding a staff member's article being published be received.

Purpose

To highlight for Members of Council the staff article by Jeanne Pitts that was recently published. The article "Workers Want to be Immunized Against Hepatitis" was published in the fall issue of the JOURNAL, the official publication of the Ontario Occupational Health Nurses Association.

Background - Analysis and Options

We have encouraged staff to get involved in their respective associations and writing and publishing articles is one way of getting involved. It promotes the City and the individual and this article has already received interest from other employers.

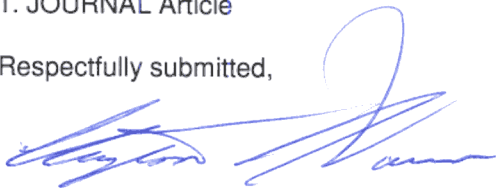
Conclusion

As an organization we should continue to encourage and support all forms of professional development.

Attachments

1. JOURNAL Article

Respectfully submitted,



Clayton D. Harris, CA
Commissioner of Finance & Corporate Services

Workers Want To Be Immunized Against Hepatitis

A MAN with a small laceration on his face came to the health centre. The wound was only bleeding slightly and a small band-aid easily covered the 1/4" deep puncture.

"The wrench slipped," the sewer worker reported. "Thank goodness I got the Hepatitis shot?"

Immunity against Hepatitis A and B is a concern to employees in areas other than hospitals and clinics. Blood borne pathogens exist in the work environments of municipal employees. I am the occupational health nurse for a city that employs people who work with or around raw sewage and others who work outside in the parks and roadways where used syringes are found and collected. These workers are concerned about the risk of Hepatitis.

Protecting people, property and the environment is integral to health and safety programs so the workers brought their questions to me. I targeted a group, sent out a questionnaire and developed a project plan. Directors, managers and the workers themselves were overwhelmingly interested in the project.

Traditionally, the participation rate in company paid inoculation is 30 %. Our pilot group included the people who were asking the questions and also others who were at risk for frequent exposure to contaminated material while at work. The offer was made, the staff voluntarily attended on-site clinics and our participation rate was 80%.

Assessing the Risk

Is Hepatitis a risk? The employees were asking and to the surprise of some, the National Advisory Committee on Immunization (NACI) had not yet recommended any specific vaccination for municipal sewage workers. The Ministry of Labour has identified Hepatitis B as a potential health hazard to workers in waste disposal units for the developmentally challenged, hospitals, medical laboratories, offices and clinics. The sewage from these sites is in the large water system and everyday people in our employee community work with the wastewater fluids from these institutions. In addition, other employees scoop condoms, syringes and needles off sewer grates and out of waste containers in the parks.

Under the *Occupational Health & Safety Act*, employers must protect their workers for health and safety hazards found in their workplaces. I had to ask myself, "Were we doing that?" and "Should immunization be offered as an optional control to municipal workers?"

The Canadian Centre for Occupational Health and Safety (CCOHS) reports that hygiene practices are extremely important. They advised that workers be informed about:

- The necessity of using appropriate protective clothing and the importance of removing it at the end of the shift.
- The need to avoid rubbing the eyes with contaminated hands.

The necessity of washing hands before eating, smoking, and/or nail biting.

The importance of changing their clothes and shoes before returning home.

At the same time they called Hepatitis B "the major infectious occupational disease". They reported that an infection could follow an unrecognized contact between a minuscule break in the skin and body fluids. In addition, they said that in 35% of cases, no risk factor is ever identified. It is expected that six -10% of newly infected adults will return to apparent health after an acute attack and continue to carry the virus in their blood. They can then transmit it to others for years and sometimes for a lifetime. Contracting Hepatitis is reported to be a greater worry than AIDS. When exposed to body fluid viruses, there is a 0.3 % chance of getting HIV, five-10% chance for Hepatitis C (HCV) and six-30 % for Hepatitis B (HBV). Occupational issues related to cost, monitoring and surveillance are out-weighted by the personal issues related to the illness. Hepatitis restricts social and sexual activities, causes liver dysfunction and possibly death.

Our outside and sewage workers are provided with personal protective equipment (PPE) and hand washing substitutes are available on their trucks but they were asking for immunity and common sense told me that the cost of a single incident would be greater than the cost of

implementing immunization as a hazard control.

The CCOHS provided me with copies of studies that had been collected by their technical staff. A Quebec study (DeSerres et al, 1995) showed that sewage workers are at greater risk for Hepatitis A especially during community outbreaks. A study from the UK (Brugha et al, 1998) said that of 50 employees exposed to raw sewage on a regular basis, 30 have had a Hepatitis A infection and the study recommended that employees at risk for frequent exposure should have immunity ensured. A July 2000 Alberta study (Workplace Medical Guideline, 2000) reported that the European evidence had not been confirmed by others so they were not recommending universal immunization but they also said that the Hepatitis vaccine was safe and effective for anyone wishing to be vaccinated.

The frequency of exposure to potential contamination had become a concern to our workers. I sent out a questionnaire asking about exposure. I asked the workers to discuss Hepatitis immunity with their family doctors. I also asked about on-site clinics. I poled the supervisors and managers and the response from everyone was decidedly in favor of immunization. Vaccinations seemed like an appropriate, simple and effective control.

I contacted other Municipalities to study their practices. One city ran Hepatitis B clinics for their employees seven years ago. The three doses were offered on site and on schedule. An anti HB antibody titre followed to confirm successful vaccination. The local firefighters were the only employees who took advantage of the opportunity. Another city currently offers immunization only

to their firefighters by reimbursing the costs to the family doctor. They are now looking at extending the program to other departments.

Infection Control at York Regional Health Services has a hotline that will answer questions about what to do if accidentally contaminated with blood or body fluids. They suggest suspicious puncture wounds or splashes be assessed at a hospital emergency department within the first 24 hours of the incident. They recommend that blood work to determine the baseline levels for HIV, HBV and HCV be requested. Also they say that if appropriate, HBIG (Hepatitis B Immune Globulin) be injected but they warn that it is expensive and as a result the cost limits its use.

Identifying the Stakeholders

1. Employees who could be exposed to contaminated body fluids (i.e. staff of the water, wastewater, waste management, parks operations, public works, inspection services, roads, and health and safety departments).
2. Directors, Managers and Supervisors of these departments.
3. The Director of Human Resources.

Objectives

1. Identify biological and infectious hazards.
2. Promote the Corporation as a caring employer.
3. Schedule clinics on time and on-site for the 3 recommended doses of the SmithKline Beecham Twinrix combined Hepatitis A and B vaccine.
4. Facilitate a convenient and cost effective intervention against illness.
5. Provide an additional barrier against infection.

The Project Plan Flow Chart

1. Compare the practices of similar employers in other cities.
2. Analyze the costs, products and mode of implementation. Survey the employees for interest.
3. Send out a questionnaire to directors and managers for plan development and approval.
4. Deliver the information presentation.
5. Request: consent and/or a waiver.
6. First clinic.
7. Second clinic: one month later.
8. Third clinic: five months later.
9. Provide a yellow immunization card to each participant and record the dates in the occupational health record. Ask participants to request that an anti HB antibody titre be completed during their next physical and that their family doctor confidentially record the results.

Conclusion

The cost per dose at a doctor's office is similar to the cost per employee at an on-site clinic. With the support of upper management, Hepatitis A and B vaccine was offered to the employees at high risk. A local firm named 'At Work Health Solutions Inc' ran our clinics. Medical services, vaccine, equipment and disposal were included in the price. Paula Gennara, our Health and Safety secretary assisted with the paperwork for the project.

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Protection and wellness promotion are part of the corporate culture and when asked, our employees wanted to be immunized against Hepatitis. The management of the City of Vaughan listened and I for one sleep a little easier.



Jeanne Pitts, R.N., B.A. is responsible for providing nursing services to the employees of the City of Vaughan, Hydro Vaughan Distributions Inc. and Vaughan Public Libraries. She is a graduate of the St. Thomas-Elgin General Hospital School of Nursing and York University. Throughout her career in Occupational Health, Jeanne has been active in providing direction for a variety of health subjects including wellness, employment rehabilitation and modified work programs. You may reach Ms. Pitts by email at: pittsj@city.vaughan.on.ca

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