



## **Ergonomics - Support for our Vaccinators**

Ergonomics is the relationship between the worker and the job and focuses on the design of work areas or work tasks to improve job performance. Poor ergonomics can lead to Musculoskeletal disorders also known as Work Related Upper Limb Disorders (WRULDs) and Repetitive Strain Injuries (RSIs). These are soft tissue injuries that affect the muscles, tendons, nerves, ligaments, joints and/or blood vessels.

The issue of ergonomics was first identified for vaccinators in the Mass Vaccination Centre (MVC) at Citywest. This site was later used as a pilot for the development of a tailored vaccinator ergonomic programme to ensure the safety, health and wellbeing of staff onsite.

Phil O'Neill is the Site Operational lead for the Citywest Vaccination Centre and as well as her many other responsibilities, health & safety fell under her remit. Phil has been instrumental in the roll out of this tailored ergonomics programme onsite. To reflect on the success of this programme, the National Health and Safety Function (NHSF) have asked Phil to participate in an interview in order to share the learning and benefits experienced onsite.

### **1. Q: How was ergonomics identified as a health and safety issue among the vaccinators?**

A: As part of the Safety Management System within the MVC, risk assessments were completed for the vaccination centre which looked at the tasks undertaken by staff and identified risks associated with poor ergonomics. One of the remedial actions taken was to engage the expertise of an ergonomist to review the vaccinators work practices and establish control measures that would reduce the risk of injury and promote the safety, health and wellbeing of our staff. Aside from the potential injury to staff, if our vaccinators were unavailable to work due to injury, this may have negatively impacted on the rollout of the vaccination programme. The vaccination programme is a high-pressure operation, with a critical need to deal with high volumes, in unique circumstances. Therefore, it was essential that vaccinators could operate in suitable conditions. A specific Ergonomics risk assessment was carried out by an external provider who consulted with staff onsite in March 2021.

### **2. Q: What were the main risk factors identified as part of the assessment?**

A: The ergonomic risk factors identified from the risk assessment included:

- Awkward postures: due to work practices where Vaccinators were standing and bending to deliver the injection. These are non-neutral postures put more stress on the vaccinators musculoskeletal system.
- Repetitive tasks: High task repetition, when combined with other risks factors such high force and/or awkward postures, can contribute to the development of a Work Related Musculoskeletal Disorders. The duration of these stooped postures with vaccinators ranged from 5-13 seconds repeated every 3-6 minutes. Although the load was not heavy the weight of the vaccinator arm and positioning was the issue.
- Psychosocial and organisational factors: Issues such as workload demands, scheduling and task rotation etc. Staff questionnaires reported fatigue and discomfort mostly in the upper body with some reports of discomfort and fatigue in the lower body. Staff morale was crucial, and the operational management facilitated this by acknowledging staff participation and making each milestone in the vaccination progress.



### **3. Q: How did staff engage?**

A: Staff engaged with the process very well. The assessor(s) used a variety of different methods to carry out the assessment such as:

- “Open ended question” interviews.
- Observation of work equipment and working environment.
- Use of camera to take photos of working environment etc.
- Use of videos during process.
- Analysis of data using ergonomic measurement tools.
- Collection of workload patterns.

### **4. Q: What was the key finding from the assessment?**

A: As vaccinators had been observed standing while administering the vaccines, it was recommended that height adjustable chairs be provided for all vaccinators in the bays and that patient and vaccinators should be sitting at a similar height.

This included the review of the layout of the bays to ensure that frequently used items were within easy reach of the vaccinator, avoiding over-reaching, stretching or awkward postures during the vaccination process.

It was also recommended that postural awareness information sessions for vaccinators be completed to further educate staff on the risks of MSD's and promote optimum seating positions for the vaccination process.

### **5. Q: The National Health & Safety Function co-ordinated postural awareness sessions for vaccinators, what were the benefits from this programme?**

A: These sessions were a great success, feedback from the staff was extremely positive and they liked the fact that we were looking after their safety and not just the safety of the recipients of the vaccine and the vaccine itself. This programme created great awareness for our vaccinators as they were provided with information and guidance relating to ergonomics and the prevention of MSD's while carrying out their work. This advice included optimum workstation layout, optimum vaccinator and recipient positioning, a requirement for stretching and short “micro-breaks” and how to adopt a good seated posture. As stated, the feedback from evaluation forms was very positive and participants expressed how relevant and practical the information was to their work practices.

### **6. Q: Following the implementation of the recommendations, was there a reduction in the risk rating?**

A: Vaccinators have adopted a seated posture and this has had a significant impact on the reduction of musculoskeletal risk. From the initial assessment to the final assessment, the risk rating has reduced from a high to negligible risk. It is also worth noting that the introduction of the chairs in no way impacted on the delivery of the service or the time taken to administer the vaccine.



**7. Q: How was your experience working with the NHSF?**

The experience was very positive. It improved conditions for the staff, thus contributing to the efficiency of the operation. The practical changes made were welcomed, and just as significant, they contributed to the overall positive culture of the operation.

**8. Q: What advice would you give to Managers dealing with health & safety?**

Embrace health and safety, not only as a challenge, but also as a positive contribution to the operation, to the benefit of the entire team.