Influenza in residential care: Prevention and management

Influenza remains the leading cause of death from infectious disease among elderly people, largely due to declining immune competence with age, and is a significant cause of death and hospitalisation among the elderly and frail in residential care settings. Residential care facilities are considered to be high risk environments for influenza due to the older age of residents, the high prevalence of chronic medical conditions, communal living arrangements, shared caregiving and the continued close proximity of residents. This article, provided by Dr Fiona Ryan (consultant in Public Health medicine), details lessons learned from the 2012/2013 influenza season and what proactive measure we as GPs should consider for the 3013/2014 influenza season.

2012/2013 Influenza Season

The 2012/2013 influenza season was unusual in two ways – it was prolonged and a large number of outbreaks were reported in long-stay residential care facilities. The rise in influenza activity started at the end of 2012 and was sustained for over 3 months. Initially, the majority of cases were influenza B but as influenza B decreased there was a rise in influenza A. Click here for the detailed surveillance report.

The rise in reported outbreaks is, in large part, due to increased awareness and reporting. Nationally, there were 61 influenza outbreaks reported in residential care facilities, 32 influenza A and 9 influenza B (typing information was not available for 20 outbreaks).

The experience of outbreaks last season has highlighted a number of issues:

1. The uptake of influenza vaccine is generally high among residents in long-stay residential facilities.
2. The uptake is much lower in those admitted for short term respite care.
3. The uptake is very low among staff in these facilities.
4. The recorded uptake of pneumococcal vaccine in residents is low.

Immunisation

The influenza vaccine is never 100% effective in preventing infection. The efficacy is lower in the elderly and those who are immunocompromised. However, vaccine still offers the best protection against influenza.

Information on influenza prevention and management will be circulated to all residential care facilities in the autumn, including the following advice:

- Vaccinate all residents with the influenza vaccine.
- During the flu season, those being booked for respite care should have their influenza vaccination status recorded. If they have not been vaccinated, they should be advised to contact their GP regarding vaccination prior to admission.
- Maximising vaccine uptake in front-line health care workers is critical in the prevention of morbidity and mortality due to influenza in vulnerable residents of long-stay facilities.
- Pneumococcal vaccination is recommended for most residents of long-stay facilities.

Click here to see the Checklist for Residential Care Facilities on the Prevention, Detection and Control of Influenza-like Illness and Influenza Outbreaks, which will again be sent to residential care facilities this autumn.

Click here for further information on the indications for the influenza vaccine, and click here for the pneumococcal vaccine.

Detection of Outbreaks
Influenza can be difficult to diagnose in frail elderly patients as the classical fever response may be blunted. If an increasing number of residents become unwell over a short period of time with respiratory illness, influenza should be suspected. Any staff members who are ill will usually exhibit more classical influenza symptoms.

It is important that Departments of Public Health is notified of suspected outbreaks of influenza in residential units with vulnerable residents so that we can promptly investigate, co-ordinate the taking of viral swabs, provide infection prevention and control advice and advise on treatment and chemoprophylaxis.

Treatment and Prophylaxis
The use of antiviral drugs for treatment and chemoprophylaxis of influenza is a key component in influenza outbreak control in residential care facilities as many of the residents are at higher risk of complications. Antiviral drugs are effective against influenza A and B, in reducing the severity and shortening the course of illness if given early (within 48 hours of illness onset for oseltamivir (Tamiflu)), even in elderly adults. Antiviral therapy may still be beneficial in patients with severe complicated or progressive illness when commenced >48 hours after the illness onset.

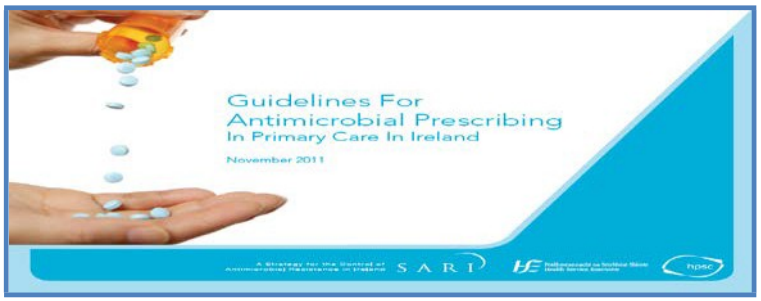
Antiviral chemoprophylaxis may be indicated for residents for post exposure prevention. Public health will advise on the need for prophylaxis.

Click here for further information on antiviral treatment guidance.

Many of the residents in long-stay facilities are at risk of complications from influenza illness, including secondary bacterial infections. Click here for information on antibiotic prescribing guidance.

Appropriate antibiotic prescribing

We are heading into the winter and it's time for me to remind you about appropriate antibiotic prescribing. There are 3 things I would ask all GPs to focus on this winter. In addition, I would like to remind you that national primary care antibiotic prescribing guidelines are now available in a format which will adapt to any smartphone, tablet or computer, making it easy to check the most appropriate treatment for the patient in front of you.



Healthcare associated infections from resistant bacteria are difficult to treat, cause prolonged illnesses and hospital stays, and increase the risk of death. It is estimated there are 25,000 deaths from five common multi-drug resistant bacteria each year in Europe. Antibiotics are a precious resource, and have facilitated many of the medical advances that we now take for granted, e.g. organ transplantation, chemotherapy.
There are some indications that things are improving. MRSA rates are decreasing, with better hospital antibiotic stewardship and hygiene. We are prescribing less fluoroquinolones (e.g. Ofloxacin, Ciprofloxacin) and cephalosporins in the community. Patients' attitudes are slowly changing.
As GPs, there are some straightforward things we can do to accentuate this trend.

Three Things GPs Can Do
1. Use narrow spectrum antibiotics to treat bacterial infections when the clinical scenario clear. There is no indication to prescribe anything other than phenoxymethylpenicillin (Calvepen, Kopen) for pharyngitis/tonsillitis, even with invasive Group A streptococcal infections, unless the patient is truly allergic to penicillin.
2. Restrict the prescribing of macrolides (Erythromycin, Clarithromycin) in situations where mycoplasma is present or suspected, penicillin allergy is present, or where sensitivity indicates their use. We use far more macroglides than our European neighbours yet there is no evidence that the the Irish population is “more allergic “to penicillin.
3. Penicillin with enzyme inhibitor (e.g. Co-Amoxyclav) is not a first line drug for the common conditions encountered in general practice. The vast majority of such conditions should be treated with Amoxycillin, Trimethoprim, Nitrofurantoin, Phenoxymethylpenicillin or Flucloxacillin.

Where Can I Get Further Information?

- a) Antibiotic prescribing guideline www.antibioticprescribing.ie
- b) Antibiotic use in the community in Ireland http://www.hpsc.ie/hpsc/A-Z/MicrobiologyAntimicrobialResistance/EuropeanSurveillanceofAntimicrobialConsumptionESAC/SurveillanceReports/

c) Public information campaign on antibiotics, including campaign materials
http://www.hse.ie/go/antibiotics

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