

Pneumococcal Disease Call to Action

Protecting Older Americans from
Serious Pneumococcal Disease

A Task Force Report

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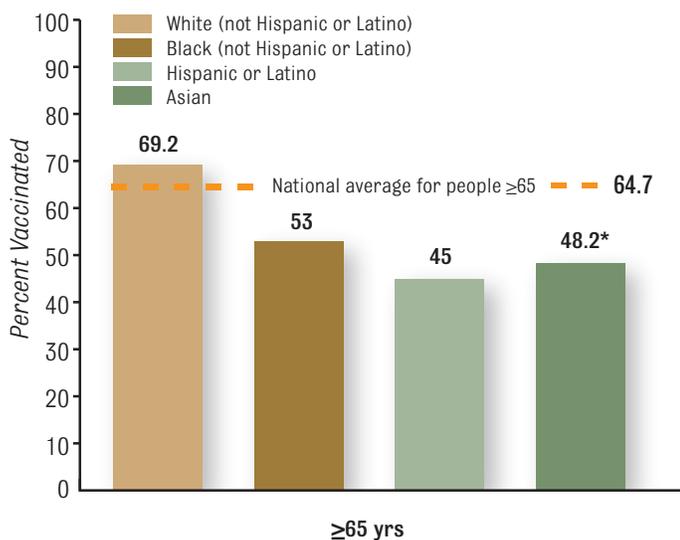
Too many Americans age 65 years and older remain at risk for severe pneumococcal infection.

Adults of any age may develop pneumococcal disease, but it disproportionately affects those age 65 years and older. Half of all patients who die from invasive pneumococcal disease are in this age group.¹

Pneumococcal vaccination needs to be used more widely to protect older Americans from the worst outcomes of pneumococcal infection. (See boxes at right for more information about the impact of pneumococcal disease.)²⁻⁴

Pneumococcal polysaccharide vaccination* is recommended for all adults at age 65;⁵ yet a 2011 national survey indicates that only 64.7 percent have received it.⁶ Vaccination rates are lower among older blacks, Hispanics, and Asians than among older whites (Figure 1).^{6,7}

Figure 1
Pneumococcal Vaccination Rates in US Adults ≥65, 2011



* 2010 data.

Sources: CDC. National Health Interview Survey, 2011.⁶ CDC. Adult vaccination coverage, 2010.⁷

Increasing pneumococcal vaccination rates in older Americans will take multiple strategies, and all healthcare professionals who interact with these adults share the responsibility for ensuring they are protected.

* The US Food and Drug Administration recently approved a 13-valent pneumococcal conjugate vaccine (PCV13) for use in adults age 50 years and older. The CDC's Advisory Committee on Immunization Practices has not yet provided guidance for the use of PCV13 in adults.

Annual Public Health Burden of Pneumococcal Disease in Older Americans^{2,3}

Pneumococcal Infection	Overall Case Fatality Rate	Case Fatality Age ≥65
Meningitis	30%	80%
Bacteremia	20%	60%
Pneumonia	5%-7%	10.6%

The Considerable Costs of Pneumococcal Disease

- In 2004, pneumococci caused an estimated 4 million illness episodes resulting in direct medical costs (inpatient and outpatient) of \$3.5 billion.
 - About half of these costs (\$1.8 billion) were related to care of patients age 65 years and older.⁴
 - Other costs, which cannot be measured as easily, include lost productivity and diminished quality of life.
- Although younger adults with pneumonia often can be treated as outpatients, older ones usually require hospitalization.
 - Of approximately 400,000 inpatients with pneumonia caused by *Streptococcus pneumoniae* in 2004, well over half (242,000) were age 65 years and older.⁴
- Invasive pneumococcal infection was also prevalent in those age 65 years and older, accounting for 5,000 of the 12,000 cases of bacteremia or sepsis and 700 of the 3,000 cases of meningitis.⁴

A multidisciplinary task force identified three main barriers to better immunization in people age 65 years and older.

The National Foundation for Infectious Diseases (NFID) brought together a task force of healthcare professionals, public health officials, and consumer educators representing more than 20 organizations to prioritize barriers to pneumococcal vaccination among US adults and to identify solutions.

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Attendees participated in large group discussions and smaller working sessions that focused on specific patient populations.

Task force members identified the following as some of the biggest barriers to pneumococcal vaccine uptake in older Americans that can be addressed by healthcare professionals:

- Lack of attention to pneumococcal prevention among healthcare professionals
- Competing priorities during patient visits
- Lack of public awareness about pneumococcal disease and available prevention

Lack of Attention: Healthcare professionals and their professional associations need to take action to increase pneumococcal vaccination among older Americans.

Surveys have shown that physicians are the prime motivators of patient vaccination decisions.^{8,9} But while most physicians are familiar with age-based recommendations for pneumococcal vaccination (87 percent in one survey), there is evidence that a much smaller percentage is actually recommending vaccination to their patients.^{9,10}

While physicians need to step up their efforts, they are not the only healthcare professionals who can play a role in increasing pneumococcal vaccination rates. Many adults age 65 years and older say they would be influenced by other healthcare professionals when making vaccination decisions.^{†11} Older patients may interact with any number of professionals through practice and in-home visits, hospital stays, and trips to a pharmacy for medication, including: physicians, nurse practitioners, nurses, pharmacists, physician assistants, public health nurses, and clerical staff. Every one of these professionals should be educated about the importance of pneumococcal prevention and provided with messaging to counsel patients about all needed vaccines.

Professional associations can support this education by implementing strategies to encourage patient counseling, referral, collaboration, and vaccine delivery, including:

- Educating members about pneumococcal prevention
- Listing pneumococcal vaccination in appropriate clinical

guidelines for the treatment of individuals who are age 65 years or older

- Publicizing the inclusion of vaccines in the guidelines

Individually, **any professional** who interacts with older adults can play a role in pneumococcal prevention efforts. The responsibility falls not just on primary care physicians but also on specialists and other healthcare professionals.

- **All healthcare professionals** can educate older patients and their caregivers and *strongly urge* patients to be vaccinated.
- **Physicians** can drive the implementation of systems in their practices to vaccinate all patients age 65 years and older.
- **Physician assistants** and **nurse practitioners** can prescribe and administer vaccines, and along with **nurses**, can identify and educate older patients and caregivers, anticipate and address questions or concerns, and lead in-office efforts to use educational materials like posters, signs, and fliers.
- **Specialists** can screen, educate, and vaccinate or refer patients to venues for vaccination.
- **Pharmacists**, where authorized, can administer pneumococcal vaccine to recommended adults and can target outreach and messages to patients based on their birth date, medical history, medications, or their use of Medicare to cover prescriptions.
- **Public health officials** can educate community members, and where possible, offer pneumococcal vaccination or arrange for vaccination opportunities elsewhere in the community.
- **Support staff** in any healthcare setting can be given ownership of important prevention activities, particularly patient screening, notification, and chart preparation with reminder materials for clinical staff.
- **Hospital staff** can advocate for and/or implement standing orders programs and make sure electronic medical records (EMRs) or patient charts reflect needed vaccines. The Joint Commission has included pneumococcal vaccination as a 2012 performance measure,¹² and the potential effect on accreditation may be a strong motivator for compliance.
- **Members of professional associations** can support/encourage the activities mentioned above.

[†]These included pharmacists, physician assistants, nurse practitioners, and nurses.

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Competing Priorities: Developing systems in private practices, clinics, long-term care facilities, home health agencies, hospitals, and other care delivery settings can help pave the way for vaccination.

Chronic health problems may bring older patients into a healthcare setting routinely, opening up many opportunities for vaccination. Unfortunately, numerous prevention activities compete for attention alongside acute problems and other prevention concerns. Systems should be implemented to screen, educate, and either vaccinate or refer patients so that these opportunities are not lost.

One of the most effective strategies at an organizational level is the implementation of a standing orders program.¹³ Standing orders enable nurses and other qualified professionals to administer vaccines routinely to unvaccinated seniors. Although standing orders can be applied in any practice setting, they may be particularly impactful for pneumococcal prevention when used in hospital settings. Failure to vaccinate older patients before hospital discharge is a missed opportunity that puts them at risk for future illness and re-hospitalization.¹⁴

Ideally, pneumococcal vaccines should be stocked and administered in any setting where older patients are treated. At a minimum, professionals in settings where vaccination is not available should educate patients and refer them to a place in the community where they can be vaccinated.

In any setting, multiple strategies will be necessary to have a meaningful impact. Among those that practices should consider are:

- Implement standing orders programs.
- Administer pneumococcal vaccine to the unimmunized upon admission to long-term care programs.
- Use screening tools at check-in, such as notes in EMRs or a prompt card for staff to ask all patients born before a certain year whether they have received pneumococcal vaccination.
- Be especially vigilant about offering vaccines to black and Hispanic patients, who have lower pneumococcal vaccination rates than whites.
- Include notations or standardized checklists in EMRs or paper charts to remind clinicians about the importance

of pneumococcal vaccination for patients age 65 years or older.

- Check your state's Immunization Information System (IIS, or immunization registry) to see if the person has been immunized previously against pneumococcal disease. If the IIS does not record vaccinations for adults, ask your professional society to advocate that it do so.
- When seeing an older patient who was hospitalized, inquire whether he or she was vaccinated before discharge; if not, advocate for it as a way to avoid illness that could require another hospitalization.
- Have clerical staff send information about pneumococcal vaccination and its Medicare coverage to patients turning 65 and to older patients who have not yet been vaccinated.
- Link pneumococcal prevention efforts with annual influenza vaccination activities (while using care to educate patients and staff that pneumococcal vaccination is needed only once for those 65 and older and may be given any time of the year).
- In settings where vaccine is not administered, equip check-out staff with information to refer patients to venues for vaccination, such as a primary care practices, local health departments, or pharmacies.
- Work with non-medical community members to arrange for pneumococcal vaccination opportunities at places where older people go, such as senior centers, shopping malls, and the polls on Election Day.
- Engage multiple professionals in vaccination activities (as discussed above).

Lack of Public Awareness: Supporting efforts to educate patients and caregivers inside and outside the practice can help increase vaccination rates.

Only 15 percent of adults age 65 years and older say they are familiar with pneumococcal disease, but most will be motivated by simple messages that address the potential impact of pneumococcal disease, the effectiveness and safety of pneumococcal vaccination, and knowledge that CDC recommends vaccination for them.¹¹ It is therefore imperative that HCPs deliver these types of messages.

Concerns about cost may deter some people from asking about pneumococcal vaccination, making it important to tell

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patients that Medicare covers the costs of both the vaccine and its administration by a recognized provider.¹⁵

Community members outside the healthcare setting can be effective partners in educating adults age 65 years and older. For example, a healthcare professional could partner with staff at a local senior center to provide an information session or a vaccination clinic for its members.

It can also be beneficial to engage trusted community leaders, such as clergy, to deliver vaccine messages, especially when trying to reach seniors who may distrust vaccines or the medical system. This has been shown to be an issue in the African American community.¹⁶ However, while distrust of the system at large exists among older African Americans, they do trust their personal physicians, and discussions with them are important to their decision-making.¹⁶

A range of educational activities can be used to educate older adults and make them receptive to vaccination, including:

- Display educational materials (eg, posters, fact sheets) in offices to prompt patients to ask about vaccination during their visit.
- Educate patients through practice websites, newsletters, on-hold/voicemail scripts, or other communications.
- Urge younger patients to encourage their parents and grandparents to receive pneumococcal vaccination.
- Encourage older patients to incorporate pneumococcal, and other appropriate adult vaccines, into their wellness efforts.
- Use strong language, eg, “You should be vaccinated before you leave the office today,” rather than, “It’s a good idea to get vaccinated.”
- Inform vaccine recipients about Medicare and Medicaid coverage of pneumococcal vaccination.
- Reach out to community members who serve older populations (eg, social service organizations, faith-based leaders) about collaborative activities to educate and vaccinate adults age 65 years and older.
- Engage trusted community leaders in delivering prevention information to their constituencies to encourage them to seek vaccination.

Multiple strategies will be needed to improve pneumococcal vaccination rates; resources are available to support these efforts.

NFID has a Pneumococcal Disease Professional Practice Toolkit available with tools and materials to help practices improve adult pneumococcal vaccination rates and promote patient education among adults in their care. These include ready-to-use and template resources for healthcare professional and patient education, screening and tracking forms, and links to information about standing orders programs. To access the toolkit, visit: Adultvaccination.org/Pneumotools.

More than 20 medical and health organizations served on or supported the pneumococcal disease task force and helped shape the content of the meeting described in this document. Click [here](#) to see a full list.

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