

Prioritizing Resources

NC IOM / DPH Task Force on
Ethics and Pandemic Influenza

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Overview

- During a pandemic, there will likely be more needs than available supply for many different types of healthcare resources
- How should society choose among multiple individuals requiring the resource?
- *Recall that the Task Force is not charged with developing the priority list per se, but with informing leaders what ethical values the list should follow. Sample lists are provided here to demonstrate the ramifications of alternative schemes.*

(US) HHS Pandemic Influenza Plan

Supplement 6 Vaccine Distribution and Use (III.B.1)

- **To prepare for vaccination of priority groups, state and local health departments should:**
 - Identify a process for reviewing national recommendations for pandemic influenza vaccination and developing state-specific modifications or refinements in priority groups, depending on local circumstances.
 - Develop specific definitions for priority groups (e.g., public safety workers, essential service providers) identifying occupational categories and sub-categories, as needed, within each broad priority.
 - Estimate the size of relevant priority groups.
 - Develop a plan on how persons in priority groups would be identified at vaccination clinics and how vaccine would most efficiently be provided to those groups.
 - Educate professional organizations and other stakeholders about the need for priority groups and the rationale for the groups currently recommended.

Example Situation

Three patients are afflicted with the flu and in need of a ventilator, but only one ventilator exists. The three patients are a 10 year old, a 40 year old physician, and a 65 year old retiree. Suppose that without the ventilator, the 65 year old has a 10 percent chance of survival, the 40 year old has a 25 percent chance of survival, and the 10 year old has a 30 percent chance of survival. Who should get the priority to use the ventilator, and on what grounds should the decision be made?

Alternative prioritization schemes

1. Assure functioning of society
 - Healthcare workers, public safety, vaccine producers...
2. Minimize mortality and hospitalization
 - Identify those with most benefit from resource

Alternative prioritization schemes

3. Protect persons with the most life ahead of them
 - Target the young; modification might put less priority on infants (Emanuel, 2006)
4. Give everyone an equal chance to be protected
 - Lottery, first come first serve, etc.

*It is possible to combine some elements of multiple schemes.
Note that the prioritization scheme may vary depending on the particular resource.*

Potential Vaccine Priority Lists

Priorities for Distribution of Influenza Vaccine			
Tier*	NVAC and ACIP recommendations (subtier)†	Life-cycle principle (LCP)	Investment refinement of LCP including public order
1	Vaccine production and distribution workers Frontline health-care workers People 6 months to 64 years old with ≥ 2 high-risk conditions or history of hospitalization for pneumonia or influenza Pregnant women Household contacts of severely immunocompromised People Household contacts of children ≤ 6 months of age Public health and emergency response workers Key government leaders	Vaccine production and distribution workers Frontline health-care workers	Vaccine production and distribution workers Frontline health-care workers
2	Healthy people ≥ 65 years old People 6 months to 64 years old with 1 or more high-risk conditions Healthy children 6 months to 23 months old Other public health workers, emergency responders, public safety workers (police and fire), utility workers, transportation workers, telecommunications and IT workers	Healthy 6-month-olds Healthy 1-year-olds Healthy 2-year-olds Healthy 3-year-olds etc.	People 13 to 40 years old with < 2 high-risk conditions, with priority to key government leaders; public health, military, police, and fire workers; utility and transportation workers; telecommunications and IT workers; funeral directors People 7 to 12 years old and 41 to 50 years old with < 2 high-risk conditions with priority as above People 6 months to 6 years old and 51 to 64 years old with < 2 high-risk conditions, with priority as above* People ≥ 65 years old with < 2 high-risk conditions
3	Other health decision-makers in government Funeral directors	People with life-limiting morbidities or disabilities, prioritized according to expected life years	People 6 months to 64 years old with ≥ 2 high-risk conditions
4	Healthy people 2 to 64 years old		People ≥ 65 years old with ≥ 2 high-risk conditions

Unhealthy people ~1-64 years old
Healthy people ~2-64 years old

* Tiers determine priority ranking for the distribution of vaccine if limited in supply. † Subtiers in purple text establish who gets priority within the tier (starting from the top of the tier) if limited vaccine cannot cover everyone in the tier; prioritization may occur within subtiers as well. ‡ Children 6 months to < 13 years would not receive vaccine if they can be effectively confined to home or otherwise isolated.

Source: Emanuel and Wertheimer, "Who Should Get Influenza Vaccine When Not All Can?". *Science*, 12 May 2006.

Proposed Recommendation 4.1 (distinct recommendations which should be prioritized):

- **Priority in the allocation of limited resources should be made with the goal of:**
 - **Assuring the functioning of society**
 - **Reducing the incidence of disease, individual deaths and hospitalizations due to influenza**
 - **Protecting persons with the most life ahead of them**
 - **Giving everyone an equal chance to be protected**
- **These priorities are further contingent on the availability of healthcare resources and/or individual clinical considerations.**

Potential Recommendation 4.2

The NC Department of Health and Human Services should develop a community outreach committee, as part of the state's pandemic flu coordinating committee. The community outreach committee should be convened prior to and during the course of a pandemic influenza. The community outreach committee will be used to convey information to stakeholder groups and the public about the pandemic flu, as well as to provide feedback to the state in the implementation of the pandemic flu plan.

Potential Recommendation 4.3

State, local and national law enforcement should provide appropriate protection, based on available resources, for individuals in possession of, and responsible for distribution of limited resources, such as vaccines and antiviral medications.