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## **Biological Agents in Bioterrorism**

The deliberate use of biological agents as weapons poses grave threats to national security and public health. Historical incidents,

international cooperation and collaboration to strengthen global health security. Organizations like the World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), and international partnerships facilitate information sharing, capacity building, and joint response efforts to mitigate the impact of biological emergencies on a global scale.

## Challenges and Future Directions

### Emerging Infectious Diseases

The emergence of novel pathogens, antimicrobial resistance, and climate change pose ongoing challenges to biodefense preparedness and response capabilities. Addressing these challenges requires continuous research, innovation, and adaptive strategies to anticipate and mitigate the impact of future biological threats on global health [8].

### Ethical and Policy Considerations

Biodefense efforts raise ethical dilemmas related to dual-use research, biosafety regulations, equitable access to medical countermeasures, and the protection of privacy and civil liberties during public health emergencies. Balancing security imperatives with ethical considerations is crucial for maintaining public trust and ensuring transparent governance in biodefense practices.

## Conclusion

Biological agents remain significant threats to global health security, requiring sustained investment, innovation, and international collaboration to enhance preparedness, detection, and response

capabilities. By advancing scientific research, technological innovations, and interdisciplinary approaches, societies can mitigate the impact of biological emergencies and safeguard public health against evolving biological risks.

## References

1. Martins Pereira S, Hernández-Marrero P, Pasman HR, Capelas ML, Larkin P, et al. (2021) Nursing education on palliative care across Europe: Results and recommendations from the EAPC Taskforce on preparation for practice in palliative care nursing across the EU based on an online-survey and country reports. *Palliat Med* 35: 130-141.
2. Oluyase AO, Hocaoglu M, Cripps RL, Maddocks M, Walshe C, et al. (2021) The challenges of caring for people dying from COVID-19: a multinational, observational study (CovPall). *J Pain Symptom Manage* 62: 460-470.
3. Senderovich H, McFadyen K (2020) Palliative Care: Too Good to Be True?. *Rambam Maimonides Med J* 11: 34.
4. D'Antonio J (2017) End-of-life nursing care and education: end of-life nursing education: past and present. *J Christ Nurs* 34: 34-38.
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