



WORLD HEALTH ORGANIZATION

## Safe health-care waste management

### WHO core principles for achieving safe and sustainable management of health-care waste

The safe and sustainable management of health-care waste is a public health imperative and a responsibility of all. Improper management of health-care waste poses a significant risk to patients, health-care workers, the community and the environment. This problem can be solved. The right investment of resources and commitment will result in a substantive reduction of disease burden and corresponding savings in health expenditures.

#### Background:

Health-care waste can cause serious harm if not managed properly. For example, in 2000, WHO estimated that injections with contaminated syringes caused 21 million hepatitis B virus (HBV) infections (32% of all new infections), two million hepatitis C virus (HCV) infections (40% of all new infections) and 260 000 HIV infections (5% of all new infections). In addition, health-care activities generate significant amounts of hazardous waste such as mercury and expired pharmaceuticals, as well as large amounts of general waste.

The management of health-care waste is an integral part of a national health-care system. A holistic approach to health-care waste management should include a clear delineation of responsibilities, occupational health and safety programs, waste minimization and segregation, the development and adoption of safe and environmentally-sound technologies, and capacity building.

Recognizing the urgency of this problem, a growing number of countries have taken initial steps to respond to this need. These include the establishment of regulatory frameworks, development of national plans, and the demonstration of innovative approaches. However, funding for health-care waste management remains very inadequate.

#### Recommendations:

The WHO core principles<sup>1</sup> require that all associated with financing and supporting health-care activities should provide for the costs of managing health-care waste. This is the duty of care. Manufacturers also share a responsibility to take waste management into account in the development and sale of their products and services.

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<sup>1</sup> These core principles were developed during the International Health Care Waste meeting hosted by WHO in Geneva on June 20 - 22, 2007.

The establishment and sustained maintenance of sound systems for health-care waste management depend on the availability of resources. Therefore, in keeping with the WHO core principles, WHO recommends that:

**Governments should:**

- allocate a budget to cover the costs of establishment and maintenance of sound health-care waste management systems
- request donors, partners and other sources of external financing to include an adequate contribution towards the management of waste associated with their interventions
- implement and monitor sound health-care waste management systems, support capacity building, and ensure worker and community health.

**Donors and partners should:**

- include a provision in their health program assistance to cover the costs of sound health-care waste management systems.

**Non-governmental organizations should:**

- include the promotion of sound health-care waste management in their advocacy
- undertake programs and activities that contribute to sound health-care waste management.

**The private sector should:**

- take responsibility for the sound management of health-care waste associated with the products and services they provide, including the design of products and packaging.

**All concerned institutions and organizations should:**

- promote sound health care waste management
- develop innovative solutions to reduce the volume and toxicity of the waste they produce and associated with their products
- ensure that global health strategies and programs take into account health-care waste management.

All concerned institutions and organizations are invited to express their commitment to the WHO core principles for achieving safe and sustainable management of health-care waste by writing to: [hcwaste@who.int](mailto:hcwaste@who.int). WHO will maintain a public listing of entities that subscribe to the WHO core principles at [http://www.who.int/water\\_sanitation\\_health/en/](http://www.who.int/water_sanitation_health/en/)

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WHO/SDE/WSH/07.10**

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