

**Table S1.** Classification of hazardous medical wastes, as per the Republic of Korea.

	General medical wastes	Hazardous medical wastes					Infectious medical wastes	
		Body parts or fluids	Placenta	Sharps	Pathological test	Biological and chemical		Blood-contaminated
Infection	not likely		likely	likely	Significant		likely	very significant
Injury				likely	Significant			likely
Intoxication	not likely					very significant		
Ethical concerns	not likely		Significant		not likely		likely	

**Table S2.** Comparison of regulations regarding medical waste management methods such as discharge/container, storage, transport, and disposal.

	Republic of Korea	USA	Germany	Belgium	Japan	China
Temperature (°C) at which infectious wastes are stored (number of days of storage)	≤4°C (7 days)	Mississippi: ≤6°C	≤15°C (7 days)	≤7°C	-	(2 days)
Dependence on on-site disposal allowed	Very low	Low~medium (dependence is increasing)	Low	Very low	Low (dependence is decreasing)	Low~medium (dependence is increasing)
Method of on-site disposal allowed	Microwave, etc. (only 1 hospital)	Chemical, steam, microwave, etc.	Steam (autoclaving etc.), microwave	Autoclaving only	Melting, steam, dried, sterilization, etc.	Chemical disposal, steam sterilization, microwave, incineration
Landfill allowed after on-site disposal (sterilization)	- (should be incinerated)	×	× (recycling and incineration are preferred)	- (should be incinerated)	×	×
On-site incinerator allowed	×	×	-	-	-	-
Distance from hospital to the off-site incinerator	Long (~350 km; ~4 h)	Long (~500 km)	Medium (~100 km; <2 h)	Short (<1.5 h)	Medium (~100 km; 2 h)	Long
Temperature (°C) at which infectious waste are transported (regulation)	4°C	-	Practically kept at 0 °C	-	- (vehicle with cargo is permitted)	-

		(vehicle with cargo is permitted)	(there are regulations on pressure difference rather than temperature)	(vehicle with cargo is permitted)		(vehicle with cargo is permitted)
Transporting vehicles allowed for only medical waste	*	-	-	-	-	*
Dependence on off-site incineration	Very high	Low	High	Very high	Medium (getting higher)	Low
Incinerator allowed for only medical waste	*	-	-	*	-	-
Disposal of EWC 18 0104/18/02/03 (wastes whose collection and disposal is not subject to special requirements)	From special container to incineration	Can be disposed of as municipal waste	Can be disposed of as municipal wastes	Wastes contacted by blood are assumed as high-risk medical waste; others are disposed of as municipal waste	Wastes contacted by blood are infectious municipal waste; diapers without blood are treated as non-infectious municipal waste	Can be disposed of as municipal wastes
Overall extent of regulation	Extremely significant	Not likely	Significant	Very significant		Not likely