

## Estimating the Cost of Disasters on Animal Care Facilities

The animal care industry is large and encompasses many different activities, both commercial and not for profit (Table 12-1). Some may not appreciate the use of the term *industry*. Not-for-profit organizations may not like to be seen as businesses, but they too cannot operate without funding and in many cases rely on professional fund-raisers to secure that funding (see information on humane societies and advice on where to send donations in Chapter 22). What many of these businesses have in common is that they are small businesses, and as such they are affected similarly to other small businesses in disasters. A number of studies have shown the vulnerability of small businesses to disasters.

Table 12-1 Some members of the animal care industry

Type of organization	Examples
Private owners	Pet owners, livestock producers
Public owners	Native wildlife (taxpayers own wildlife, which is managed by Department of Natural Resources)
For-profit businesses	Veterinarians, pet stores, feed stores, farmers' cooperatives, animal accessory stores, department stores, boarding kennels, grooming parlors, animal transport companies, pest control companies, racetracks, renderers, slaughterhouses, circuses
Not-for-profit corporations	Humane shelters, incorporated special interest groups
Educational institutions	Veterinary schools, veterinary technician schools, animal science and agriculture schools and departments, cooperative extension services, zoos, aquaria
Regulatory institutions	Health departments, animal control, Department of Agriculture
Professional associations	Veterinary medical associations, registered veterinary technician associations
Other associations	Livestock producers' associations, breeding clubs, riding schools, search and rescue teams, wildlife rehabilitators, youth and 4H groups
Administrative organizations	Department of Agriculture, Department of Natural Resources, Public Health Service

Small businesses, such as veterinary practices, animal shelters, feed and accessory suppliers, and farms, are particularly vulnerable to disasters because the cost of disaster mitigation, insurance, and recovery is relatively higher than for large national chains. This relatively higher cost has led to a lower percentage (25%) of small businesses having disaster mitigation plans and plans to reduce the impact of business disruption than large businesses (more than 40%).

Several studies have addressed the effects of large-scale disasters on businesses. Their results are typical of the reasons that businesses shut down in both large and small-scale disasters. In addition, catastrophic events can accompany disasters, such as destruction by fire or tornado, which may be local or occur as part of a large-scale disaster, such as a hurricane or flood. Catastrophic disasters often have the worst impact on unprepared businesses. On average, small businesses affected by catastrophic events have a less than 10% chance of ever recovering.

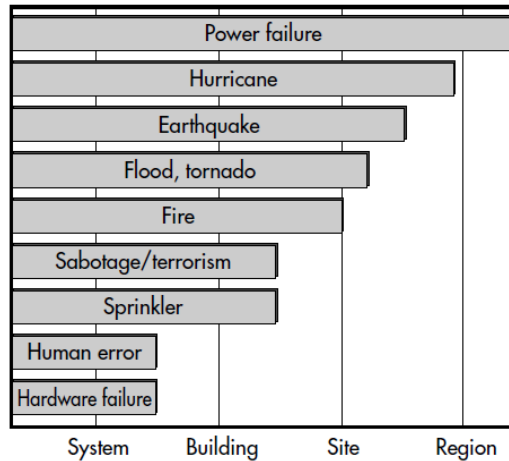


FIG. 12-1 The impact and extent of various types of disasters. (Modified from Welco J: *Disaster Recovery Journal*, 11(1):41, 1998.)

The impact of disasters on small businesses can be very damaging. For example, every day in the United States over 200 fires destroy businesses. Less than 50% of businesses affected by a major disaster make a full recovery. Of all businesses that survive for 1 year after a disaster, the small businesses are in the worst economic shape. This is probably related to small businesses having on average less insurance coverage and less resources to pay for damage. Almost half (40%) of businesses affected by a disaster are out of business within a year of the disaster, and an additional 29% go out of business within 2 years of the disaster.

Businesses that lose data are also vulnerable. Loss of data is a common disaster. Studies of small businesses have shown that over 50% of businesses suffer computer failures several times a year for at least an hour and over 11% suffer computer failure for more than 24 hours. In another study 95% of businesses that lost access to their data for 10 days filed bankruptcy within 1 year. Half of those did so immediately. Businesses with resumption plans were operational on average 40% sooner than businesses without plans.

The estimated average cost of business disruption for veterinary practices is shown in Table 12-2. The average direct cost of business disruption for U.S. veterinary practices is over \$270 per hour. The indirect cost is much higher. Indirect costs are due to permanent loss of clients, repairs, and replacement of equipment.

**Table 12-2** Direct costs of business disruption in veterinary practices

Variable	Type of practice							
	Large animal exclusive	Large animal predominant	Mixed animal	Small animal exclusive	Small animal predominant	Equine	Other	All private practices
Mean annual gross practice revenue	448,079	523,214	459,239	420,813	363,526	325,204	277,058	422,221
Mean daily gross practice revenue*	1723	2012	1766	1619	1398	1251	1066	1624
Mean hourly gross practice revenue <sup>†</sup>	172	201	177	162	140	125	107	162
Mean annual gross practice expense	292,538	356,871	301,361	282,346	291,762	201,855	173,578	282,042
Mean daily gross practice expense*	1125	1373	1159	1086	1122	776	668	1085
Mean hourly gross expense <sup>†</sup>	113	137	116	109	112	78	67	108
Mean cost of 1 day's business disruption	2849	3385	2925	2704	2520	2027	1733	2709
Mean cost of 1 hour's business disruption	285	338	293	270	252	203	173	271

Data from Gehlke BC: *J Am Vet Med Assoc* 210:1426-1428, 1997.

\*Based on 260 working days a year.

<sup>†</sup>Based on 10 working hours per day.

Because the problems related to business disruption are similar for large and small scale disasters, business continuity planning (disaster preparedness for businesses) in the animal care industry will find its firmest roots at the level of the individual business.



Devastation at a veterinary clinic after Hurricane Andrew. (Photo by Larry Dee.)