

Table S1. Characteristics of the choking event.

	Findings in studies	First author (year) (proportion listed in studies where given)
<p>People present during the incident</p>	<p>(a) Disability/health professionals: -Direct support staff -Nursing staff -Mental health staff -Volunteer carer staff or health professionals (b) Other staff: -Nursing staff (c) Other: -Another service user, other people, bystanders -Family members (e.g. grandfather, son) (d) Nobody, the person was alone</p>	<p>-Balandin (2009); Dolkas (2007); Ekberg (1992); Guthrie (2015); Pollak (1985) -Corcoran (2003) -Grubbs (1997) -Finestone (1998), Berzlanovich (2005) -Dolkas (2007) -Guthrie (2015); Berzlanovich (2005); Blaas (2016); Dolkas (2007); Grubbs (1997); Jacob (1992); Kinoshita (2015); Tashtoush (2015) -Jacob (1992); Tan (2012) Aquila (2018); Blaas (2016); Blain (2010); Jacob (1992, 33 deaths)</p>
<p>Timing of the incident</p>	<p>(a) No time trends in relation to the choking incidents (b) At various times (c) Specified times during eating and drinking: -In the morning after taking a sedative the previous night -Within 40 min of consuming a meal -During a meal, breakfast, lunch, dinner, and snacks -Timing could not be precisely determined</p>	<p>Berzlanovich (1999) Berzlanovich (2005, e.g., during transport to hospital) -Berzlanovich (2005) -Carter (1984) -Carter (1984); Ekberg (1992); Finestone (1998); Pollak (1985); Tan (2012) -Berzlanovich (2005)</p>
<p>Setting of the incident</p>	<p>Locations for eating out: -Restaurant -Bar or shop -At a picnic</p>	<p>-Berzlanovich (2005); Blain (2010); Dolkas (2007) (14%); Ekberg (1992, <i>n</i> = 9); Jacob (1992, <i>n</i> = 30); Kramarow (2014); Mittleman (1982, one third); Nikolic (2011, <i>n</i> = 7); Tashtoush (2015); Wick (2006) -Ekberg (1992, <i>n</i> = 9); Jacob (1992, <i>n</i> = 3) -Grubbs (1997)</p>

	-Trade and service area	-Kramarow (2014, 9.3%)
	-In a private home	-Berzlanovich (2005); Dolkas (2007, 45%); Ekberg (1992, <i>n</i> = 25); Hu (2014, 39%); Kramarow (2014, 37%); Mittleman (1982); Usui (2016); Wick (2006)
	(c) In a residential care setting	Kramarow (2014, 24.5%)
	-Nursing home	-Berzlanovich (2005); Ekberg (1992, <i>n</i> = 18); Hu (2014, 14%); Mittleman (1982); Wick (2006)
	-Day-care center for the elderly	-Kinoshita (2015, <i>n</i> =30)
	-Community accommodation for adults with mental illness	-Guthrie (2017)
	-Lodging	-Jacob (1992),
	-Supervised facility	-Dolkas (2007, 26%)
	(d) In the course of hospitalization	
	-During transport to hospital	-Berzlanovich (2005),
	-In hospital	-Dolkas (2007, 3%); Ekberg (1992); Hu (2014, 47%); Jacob (1992); Nikolic (2011, <i>n</i> = 5)
	-On chronic wards and acute wards	-Hwang (2010)
	-Chronic care hospital	-Irwin (1977)
	-Psychiatric hospital ward or therapeutic community	-Fioritti (1997); Nikolic (2011, <i>n</i> = 15); Punia (2009)
	-Mental institutions	-Mittleman (1982); Pollak (1985)
	(e) Other places	
	-Schools	-Dolkas (2007, 25%); Kramarow (2013, 4.6%)
	-Public areas: in the street or public vehicle	-Jacob (1992, <i>n</i> = 4) Dolkas (2007, 3%)
	-Hotels	-Dolkas (2007, 2%)
	-Lodgings	-Jacob (1992, <i>n</i> = 35)
	-Public areas (in general)	-Berzlanovich (2005)
	(f) In unknown location	Dolkas (2007, 2%)
Actions taken to clear the airway	(a) Giving verbal prompts to cough/or coughing	Guthrie (2015); Samuels (2006)
	(b) Putting the person in the recovery position	Guthrie (2015)
	(c) Calling emergency services	Dolkas (2007)
	(d) Performing the finger sweep	Dolkas (2007); Inamasu (2010); Kinoshita (2015); Sridharan (2016)
	(e) Doing backslaps/back-blows	Guthrie (2015); Inamasu (2010); Kinoshita (2015)
	(f) Performing the Heimlich maneuver	Blain (2010); Corcoran (2003); Fioritti (1997); Grubbs (1997); Kinoshita (2015); Tan (2012); Tashtoush (2015)

(g) Performing the “Table Maneuver”	The nurse “laid the choking person down on the table in a prone position with her head facing downward and her arms hanging over the table, and then gave sharp blows between the scapulas with the heel of the hand (Figure). After three or four back blows, the patient spit out one and then several pieces of beet and then started to breathe again” —Blain (2010, p. 1150.e8)
(h) performing abdominal thrusts	Guthrie (2015)
(i) conducting mechanical suctioning, combined with the finger sweep	Kinoshita (2015)
(j) perform cardiopulmonary resuscitation	Grubbs (1997); Inamasu (2010)
(k) Other strategies	
-Paramedic intervention	-Guthrie (2015)
-“More sophisticated techniques” when paramedic arrived	-Dolkas (2007, p. 177)
-“Reanimation”	-Fioritti (1997, p. 517)
-Taking the choking person to casualty by ambulance	-Gravestock (2007); Kikutani (2012)
-Tracheal intubation	-Nagamine (2011)

Table S2. Reported events during choking incidents.

Events	Reported observations
Observed signs and symptoms of choking	<p>“eyewitnesses uniformly reported that the choking victim suddenly stopped eating and talking during a meal, could not breathe, became pale, then deeply cyanotic, and collapsed” (Berzlanovich et al., 1999, p. 352).</p> <p>“Witnesses descriptions were categorized into “sudden collapse” and “turning blue” with following collapse and “vomiting/choking/coughing” according to the leading symptom.” (Blaas et al., 2016, p. 83).</p> <p>“By definition, all patients had a sudden inability to ventilate that occurred during the intake of a non-liquid bolus. Fourteen of the patients were able to vocalize for help while 61 were voiceless.” (Ekberg & Feinberg, 1992, p. 207).</p> <p>“Pt [sic] was choking turned blue was unconscious ambulance called, turning blue put into recovery position” (Guthrie et al., 2015, p. 127).</p> <p>“Female patient took two tablets and citalopram liquid medication, upon taking Forceval tablet, began to make a choking sound, dropped from chair to floor and was unable to breath.”(Guthrie et al., 2015, p. 127).</p> <p>“Client was panicking [sic] struggling to cough or breathe, client had tilted their head back, with their mouth wide open” (Guthrie et al., 2015, p. 125).</p> <p>“X was eating a pot of jelly to which she started to cough [sic] and splutter during her last mouthful. As she was choking she took in a large breath making her cough a lot [sic] harder til [sic] she brought up the jelly. This lasted about 5 seconds.” (Guthrie et al., 2015, p. 126).</p> <p>“He hadn’t changed much colour but it was just I could see him, he was trying to speak but there was nothing coming out” (Guthrie & Stansfield, 2017, p. 51).</p> <p>“He crammed food into his mouth and did not chew suffic [sic]. Appeared unable to breathe, red faced, nose running, tears.” (Guthrie et al., 2015, p. 125).</p>
Environments (time, place)	<p>“While eating tea the client began to choke and gasp for air, grabbing hold of his throat. He then jumped to his feet and started pointing at his throat his face going red in colour.” (Guthrie et al., 2015, p. 125).</p> <p>“When the other patients had left the restaurant, the patient was heard coughing. The nurse arrived and found the patient unconscious, with his head on his shoulder, and very cyanosed.” (Blain et al., 2010, p. 1150.e8).</p> <p>“Bystanders observed a 52 year old male collapse in front of his home” (Grubbs et al., 1997, p. 288).</p> <p>“Eating a hot dog at a picnic when he started choking.” (Grubbs et al., 1997, p. 288).</p> <p>“Service user put his hand through the kitchen hatch where there was a small gap and grabbed two hot cross buns and rammed them into his mouth. Was very resistive to staff assistance, was choking” (Guthrie et al., 2015, p. 127).</p> <p>“While standing up and involved in an altercation with another patient over his peanut butter sandwich, he collapsed suddenly, unobserved by the attendants. All attempts to revive him failed.” (Pollak, 1985, pp. 185–186).</p>

Note. Emphasis has been added in bold to display symptoms in the accounts.