

arsenic trioxide

64-arsenic trioxide (CAS# 1327-53-3)															
Table 1a. Sub-lethal acute poisoning (single dose): Clinical observations (time related)															
Ref No.	Reference (linked to full source)	Case No.	Case age/sex	Case category	Dose: g	Notes (case, dose, time)	Time (exposure to sampling): h	Notes (blood sample)	Blood conc.: mg/l	Blood conc.: µM	Metabolite Blood conc.: mg/l	Metabolite Blood conc.: µM	Symptoms and signs	Treatment	Time (exposure to recovery): h
1	Glazener 1968	1	48M	SA	0.13	(c), ET	8	sr	0.14	1.8			ba: V, G; 0h: LP, K	0h: ST, BAL	
		1					22		0.17	2.3			4h: H; 11d: RM	4d: D	408
2	Giberson 1976	2	43M	SA	0.4	(d), (e), ET	24	sr	0.30	4.0			ba:V, G; ET 3h: LP, K	0h:ST,BAL	
3	Vaziri 1980	2				(f), ET	28		0.14	1.9			1d: KF; 5d: RM	24h:HD	ET120
4	Lenz 1981	3	46M	SA	2		21	sr	1.20	16.0			7.5 h ba: V; 0h: C	0h: ST, NA	
		3											l: TR; 3w: N, LS	l: (k); 21h: DMS	4320
5	Fesmire 1988	4	30M	SA	2.15	(g)	3	sr	0.44	5.9			0h: MS, H; 2h: G, CP	0h: ST, BAL	
		4											l: KF, CP, R; 10d: C 6d	4h: HD 4 h,	
		4											14d: IP (l); 19d: RM, N	24h: HD; l: AR	
		4											SS: IP, N		456
6	Bolliger 1992	5	30M	UA	NR	(h)	168	wb	0.30	4.0			0h: G,H; 2d: RL,G	0h: ST	
		5											4d: N,P; 5d: PS; 6d: H,D	7d: AR, BAL	
		5											7d: PE, C; l: L,K,BD	21d: T	
		5											21d: G, RM, SS:N		21
		6	39F (a)	UA	NR	(h)	168	wb	0.40	5.3			0h: G,LP,H; 2d: RL,L,	0h: ST	
		6											IP, H, K; 3d: (m); 4d: N, P	7d: AR, BAL	
		6											6d: D; 7d: PE; l: L,BD,K		
		6											12d: RM, SS:N		21
7	Mathieu 1992	7	30M	SA	10	(i)	12	sr, p	0.45	5.9			9h ba: V, G	0h: ST,FD	
		7			24		24	sr	0.05	0.7			0h: LP,MS,KF,L, LS:N	4h: HD	336 (n)
		7			80		80	sr	0.12	1.6			4d: BD; 14d: RM	20h: BAL, HD	
8	Moore 1994	8	19M (b)	UA	1	(j)	36	wb	0.10	1.3			3h ba: G,V; 0h: K	0h: ST	
		8		UA									8d: RM	48h: DMPS	192
		9	21M (b)		4	(j)	26	wb	0.40	5.3			3h ba: G,V; 0h: K,LP	0h: ST	
		9											24h: KF; 32h: P, CA	32h: DMPS, AR	
		9											13d: RM	CR	312

arsenic trioxide

Footnotes [General Glossary (via link) lists definitions of common abbreviations (general terms, symptoms and signs, treatment)]												
MW arsenic (As 3+) = 74.92												
BAL = dimercaprol (2,3-dimercapto-1-propanol, a heavy metal chelator).												
DMPS = 2,3-dimercapto-propanesulphonate (a water soluble derivative of dimercaprol).												
DMS = 2,3-dimercaptosuccinic acid (an antidote for heavy metal poisoning).												
(a) 28 weeks pregnant.												
(b) history of cocaine abuse.												
(c) calculated arsenic trioxide equivalent (sodium arsenic).												
(d) ant poison (sodium arsenite).												
(e) before dialysis.												
(f) after dialysis.												
(g) plus 2170 mg/l alcohol in blood at presentation.												
(h) arsenic trioxide in chocolate pudding.												
(i) sodium arsenate.												
(j) a powder with 96.2% purity of arsenic.												
(k) thromboectomy and heparin.												
(l) renal tubular acidosis.												
(m) fetal death.												
(n) after 2160 h no symptoms.												

Table 1b. Sub-lethal acute poisoning (single dose): Clinical observations (without time information)															
Ref No.	Reference (linked to full source)	Case No.	Case age/sex	Case category	Dose: g	Notes (case, dose, time)	Time (exposure to sampling): h	Notes (blood sample)	Blood conc.: mg/l	Blood conc.: µM	Metabolite Blood conc.: mg/l	Metabolite Blood conc.: µM	Symptoms and signs	Treatment	Time (exposure to recovery): h
1	Vaziri 1980	1	44M	SA	0.72	(a), ET	120		0.41	5.5			G,V,LP,KF,C	ST, BAL	NR
		1				ET	168	(b)	0.36	4.8				24h: HD	
2	Mahieu 1981	2	44M	UA, X	>1	(c)	1d	wb	0.45	6.0			G, C, HCF, N, KF	0h: ST, BAL	
		2					5d	y	0.17	2.3				l: HD, T	
		2					17d		0.02	0.3					ET696
		3	40F	UA, X	>1	(c)	1d		0.79	10.5			G, C, HCF	0h: ST, BAL	
		3					7d	y	0.09	1.2					
		3					17d		0.01	0.1					ET408
		4	20F	SA, X	NR		1d		0.17	2.3			G, HCF	0h: ST, BAL	
		4					3d	y	0.05	0.7					
		4					4d		0.04	0.5					ET96
3	Kopferschmitt 1985	NR	NR	SA	3	(c)	NR	wb	0.34	4.5			G, LS:D,N	ST	NR
4	Labadie 1990	6	38M (d)	UZ	NR		NR	wb	400	5339.0			ba: MS,L,N,V,G,D	ST, BAL, AR	
		6											3d: C,RA,PE, SS:N		NR
5	Lee 1995	7	41M	SA	549	(e)	NR	wb	0.818	10.9			0h: G,V,H	ST, BAL	264 (f)
		7					72		0.181	2.4					
<b>Footnotes [General Glossary (via link) lists definitions of common abbreviations (general terms, symptoms and signs, treatment)]</b>															
MW arsenic (As 3+) = 74.92															
BAL = dimercaprol (2,3-dimercapto-1-propanol, a heavy metal chelator).															
(a) ant poison (sodium arsenite).															
(b) after dialysis.															
(c) arsenic trioxide.															
(d) long-standing daily alcohol intake of 80 g.															
(e) equivalent amount of elemental arsenic in the form dimethyl arsenic acid at 1.77% and sodium dimethyl arsenate at 10.4% in a liquid base.															
(f) time at hospital.															

Table 2a. Lethal acute poisoning (single dose): Clinical observations (time related)																
Ref No.	Reference (linked to full source)	Case No.	Case age/sex	Case category	Dose: g	Notes (case, dose, time)	Time (exposure to sampling): h	Notes (blood sample)	Blood conc.: mg/l	Blood conc.: µM	Metabolite Blood conc.: mg/l	Metabolite Blood conc.: µM	Symptoms and signs	Treatment	Time (exposure to death): h	
1	SWPC 7162238,1982	1	46M	SA	3		4	wb	16.9	225.6			0h: V,LP,KF; 2.5h: HA,E	ST, CR		
		1											5h: CA		5	
2	SWPC 3348283,1995	2	19F	SA	10	(a)	16	wb	1.20	16.0			0h: V,G,LP,KF	ST,RC,DMPS		
		2											12h: SZ,RA,CA		16	
3	Levin-Scherz 1987	3	21M	SA	2	(a)	27	(b)	0.19	2.5			9h ba: G,V	1h ba: C,R		
		3					36	(c)	0.16	2.1			1h ba: R,C,LP; 0h: CY	0h: ST, (d), (e), BAL		
		3											CF,R,G,MA,KF	1: HD, (e); E12h: (f)		
		3											1: E,H; E12h: PS; 1d:LP,P	1d: ST, RC, (e)		
4	Mahieu 1987	4	27F	SA	10	(a), (g)	13	wb	0.25	3.3			36h: PE,CF,C,CA,HA	36h: CR, AB,PM	62	
		4					24		0.08	1.1			2.5h ba: G,V,MS	0h:ST,BAL; 1: T		
		4											10h: LP; 4d: (h), LS:N	HD, HP, (i), (j)	240	
		4														
5	Gerhardsson 1988	5	51M	UA		(k), (l), T	0.67	wb	3.40	45.4			0h: V, R, P, H; 4h: G,	0h: (m), ST		
		5				(a), (n), (o)							MA(7.2/11.5), LP, CF	3h: BAL, (p)		
		5											5h: HA; OL: P, PE, G, H	4h: (d), AB		
		5												5h: CR, (e)	6	
6	Sanz 1989	6	23M	SA	20	(a)	3	wb	0.98	13.1			0h: NS; 8h: LP,KF	0h: ST, BAL		
		6					8		1.85	24.7			1: CF, (q), L; 79h: HA, CA	17h: HD, ST		
		6											OL: BE,P,L,G,K,H		NR	
7	Ghariani 1991	7	23M	SA	8	(a), ET	24		32	427.1			0h: G,V,H,L,MA	0h: ST,BAL		
		7				144	T	144		37	493.9			1: N, (r), BD, KF; 7d: HCF	8d: CR	
		7											8d: CA; OL: G,L,D,H		192	
8	Quatrehomme 1992	8	25M	SA	8	(a), (s), ET	3	sr	0.15	2.0			G, V	ST, BAL	192	
		8					144	p	0.20	2.7						

arsenic trioxide

Footnotes [General Glossary (via link) lists definitions of common abbreviations (general terms, symptoms and signs, treatment)]													
MW arsenic (As 3+) = 74.92													
BAL = dimercaprol (2,3-dimercapto-1-propanol, a heavy metal chelator).													
DMPS = 2,3-dimercapto-propanesulphonate (a water soluble derivative of dimercaprol).													
DMS = 2,3-dimercaptosuccinic acid (an antidote for heavy metal poisoning).													
(a) arsenic trioxide.													
(b) before hemodialysis.													
(c) during hemodialysis.													
(d) NarcanR, thiamine.													
(e) inotropic drug.													
(f) diazepam, haloperidol.													
(g) 55 kg.													
(h) herpes virus infection.													
(i) S-adenosyl-methionine.													
(j) Acyclovir.													
(k) 100 kg.													
(l) 550 mg/l arsenic in gastric fluid shortly after admittance to the hospital.													
(m) bethametasone.													
(n) stomach content.													
(o) inhalation and ingestion.													
(p) promethazine, doxycycline.													
(q) rhabdomyolysis.													
(r) deficiency of vitamine K and an anticoagulation circulant (ACC, type antiprothrombinase).													
(s) also represented in Table 3a: Post-mortem observations (time-related).													

Table 2b. Lethal acute poisoning (single dose): Clinical observations (without time information)															
Ref No.	Reference (linked to full source)	Case No.	Case age/sex	Case category	Dose: g	Notes (case, dose, time)	Time (exposure to sampling): h	Notes (blood sample)	Blood conc.: mg/l	Blood conc.: µM	Metabolite Blood conc.: mg/ml	Metabolite Blood conc.: µM	Symptoms and signs	Treatment	Time (exposure to death): h
1	AAPCC 1990:136	1	35M	SA	NR	(a)	NR		0.46	6.1			0h: V; ET 3h: SZ, PS ET 9h: CF, R; ET 18 h: LP, K ET 19 h: CA; OL: H, G	0h: ST; 3h: AC ET 18 h: (b) ET 19 h: CR	19
2	Gray 1989	2	25M	NR	NR	(c), T	NR	wb	35	467.2			0h:V,G; 8h:N,MA; 13h:C HCF,PE; I: CA; OL:PE	0h: ST	
<b>Footnotes [General Glossary (via link) lists definitions of common abbreviations (general terms, symptoms and signs, treatment)]</b>															
MW arsenic (As 3+) = 74.92															
(a) tobacco also ingested.															
(b) IV diazepam and phenytoin; also dopamine, dobutamine, metaraminol, and atropine.															
(c) 15-year history of insulin-dependent diabetes.															
Table 3a. Post-mortem observations (time related)															
Ref No.	Reference (linked to full source)	Case No.	Case age/sex	Case category	Dose: g	Notes (case, dose, time)	Time (exposure to sampling): h	Notes (blood sample)	Blood conc.: mg/l	Blood conc.: µM	Metabolite Blood conc.: mg/l	Metabolite Blood conc.: µM	Symptoms and signs	Treatment	Time (exposure to death): h
1	Gillies 1979	1	37M	SA	27.5	(b)	NR	wb	7.50	100.1			30 min ba: HCF, G OL: P, PE, G, BE	NT	(a) 0.75
2	Jolliffe 1991	2	28M	SA	75	(c)	NR	wb	2.30	30.7			0h: V,G,LP,MA; I: KF,N 14h: HA, CA; OL: (d) G,V; OL: P,L,G,K,H,D	0h: ST, DMS, BAL I: (e); 14h: CR	16
3	Quatrehomme 1993	3	25M (f)	NR	NR	T	NR	wb	1.03	13.7				ST, BAL	192
<b>Footnotes [General Glossary (via link) lists definitions of common abbreviations (general terms, symptoms and signs, treatment)]</b>															
MW arsenic (As 3+) = 74.92															
BAL = dimercaprol (2,3-dimercapto-1-propanol, a heavy metal chelator).															
DMS = 2,3-dimercaptosuccinic acid (an antidote for heavy metal poisoning).															
(a) time to death (autopsy).															
(b) total content of arsenic in the stomach; patient with psychiatric disorders, drank Murton's weedkiller.															
(c) arsenic trioxide, also a bottle of vodka.															
(d) multiple organic congestion.															
(e) dialysis.															
(f) same case also referred to in Table: Lethal acute poisoning (single dose): Clinical observations (time related).															

arsenic trioxide

Table 3b. Post-mortem observations (without time information)															
Ref No.	Reference (linked to full source)	Case No.	Case age/sex	Case category	Dose:	Notes (case, dose, time)	Time (exposure to sampling): h	Notes (blood sample)	Blood conc.: mg/l	Blood conc.: µM	Metabolite Blood conc.: mg/l	Metabolite Blood conc.: µM	Symptoms and signs	Treatment	Time (exposure to death): h
1	Rehling 1967	1	15 adult cases					(b)	1.05	14.0					(a)
Footnotes [General Glossary (via link) lists definitions of common abbreviations (general terms, symptoms and signs, treatment)]															
MW arsenic (As 3+) = 74.92															
(a) time to death (autopsy).															
(b) average (range 0.002 to 13.5 mg/ml).															