



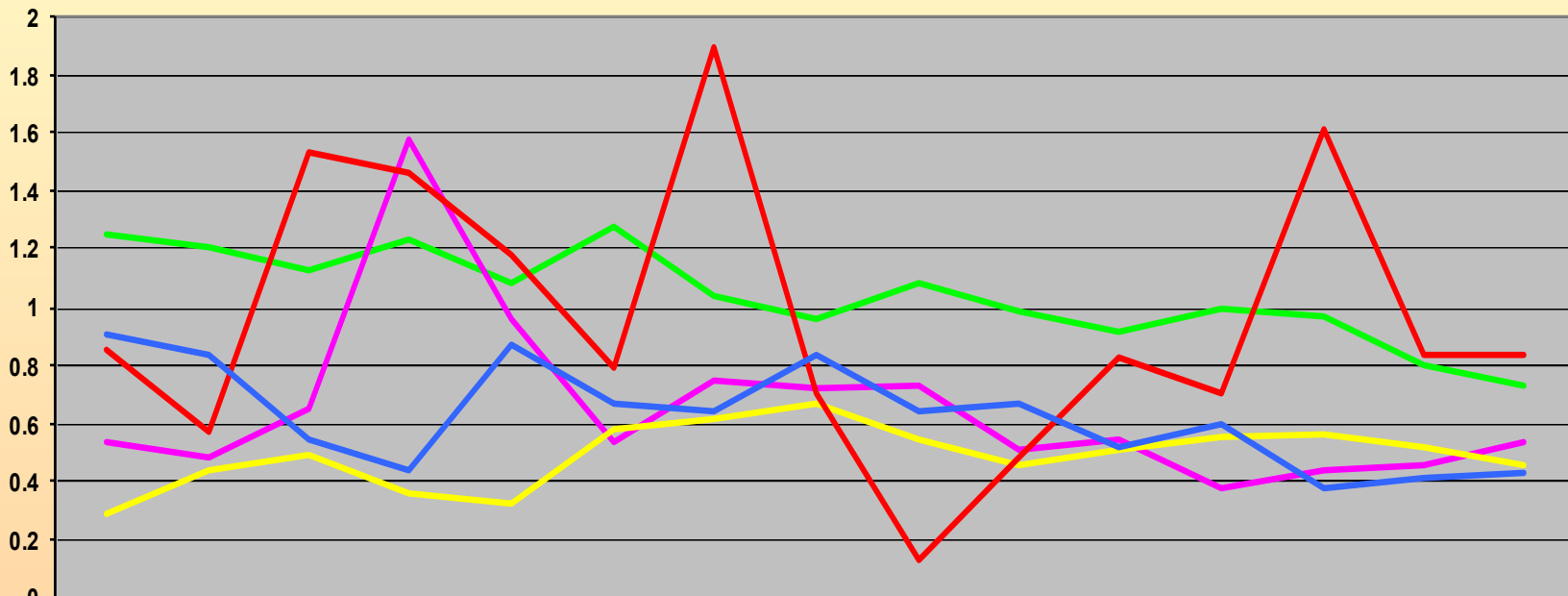
# *South Africa*

## *Mine Accident Statistics*



# RSA

## Fatality rates 1990 - 2004



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Gold	1.25	1.21	1.13	1.23	1.08	1.27	1.04	0.95	1.08	0.98	0.91	0.99	0.97	0.80	0.73
Coal	0.53	0.48	0.65	1.57	0.96	0.53	0.75	0.72	0.73	0.51	0.54	0.38	0.44	0.45	0.53
Platinum	0.28	0.44	0.49	0.36	0.32	0.58	0.61	0.66	0.54	0.45	0.51	0.55	0.56	0.52	0.45
Diamonds	0.85	0.57	1.53	1.46	1.18	0.79	1.89	0.70	0.13	0.48	0.82	0.70	1.61	0.84	0.84
Other mines	0.90	0.84	0.54	0.44	0.87	0.67	0.64	0.83	0.64	0.66	0.52	0.60	0.37	0.41	0.43



# *Disasters*

## ● Gold mining industry

- 1995: Vaal Reefs – 104 fatalities in locomotive accident
- 1997: Hartebeestfontein – 18 fatalities in a rockburst
- 1997: Deelkraal – 10 fatalities in a rockburst
- 1999: Mponeng – 19 fatalities in a methane ignition
- 2001: Beatrix – 13 fatalities in methane explosion



# *Disasters*

## ❖ Coal mining industry

1993: Middelbult Colliery – 53 fatalities in an explosion

1994: Gloria Colliery Koornfontein – 16 fatalities in a fire

## ❖ Diamond mining industry

1996: Rovic – 20 fatalities in inundation

2002: Loxton Exploration (Argo Diamonds) – 4 fatalities in conveyance accident

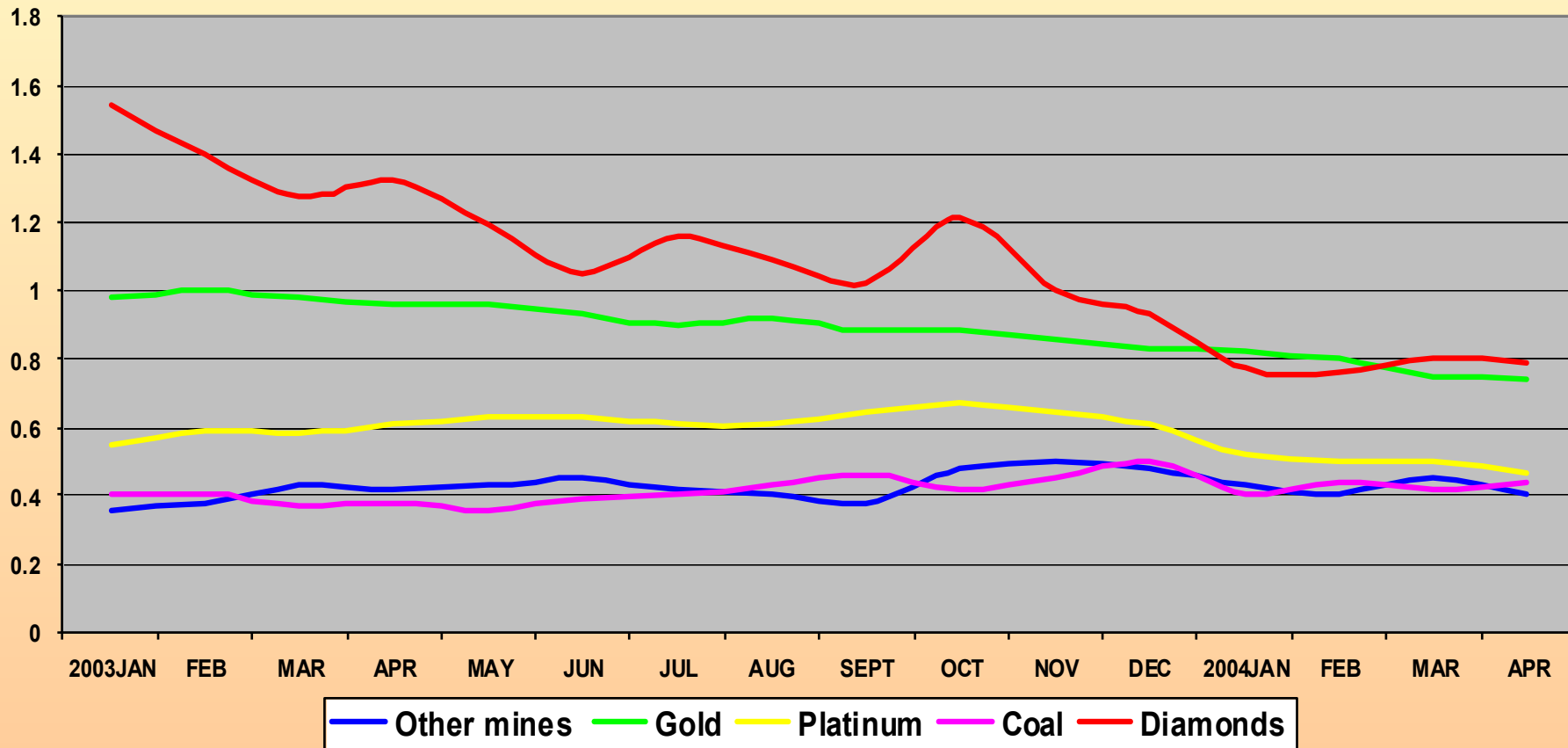


# RSA

## Main commodities

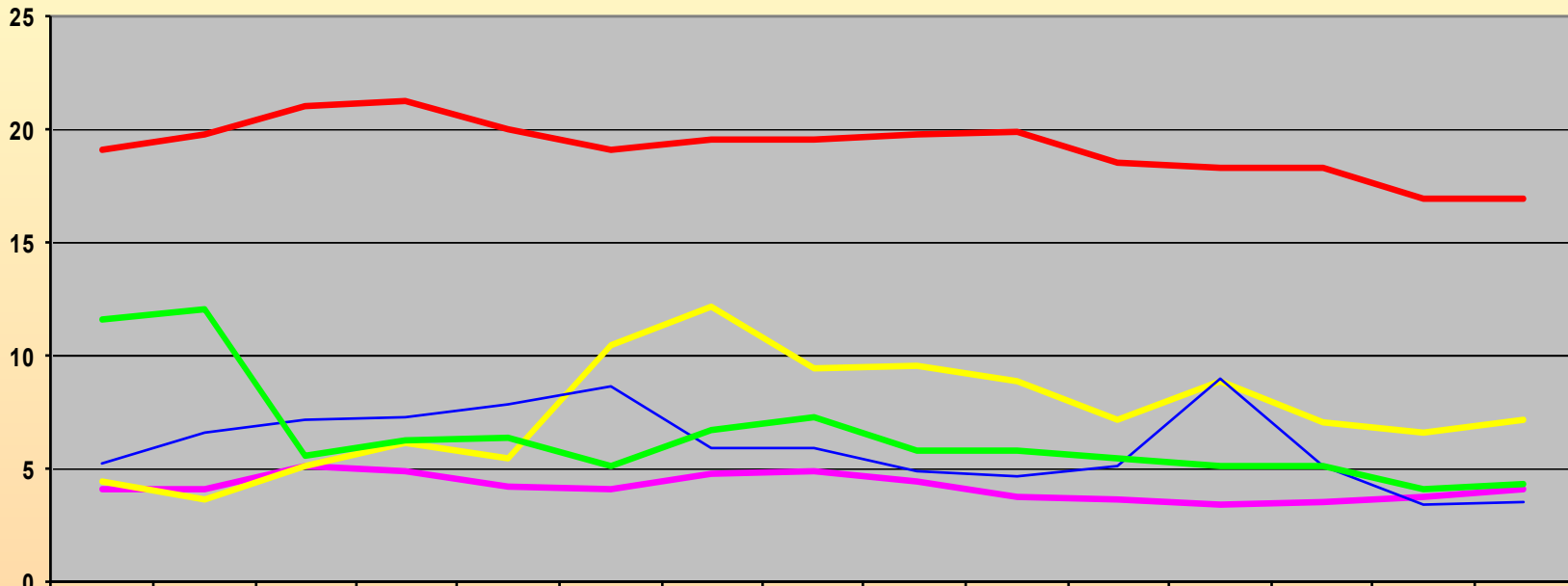
### Fatality rates

Jan 2003 - April 2004





## RSA Injury rates 1990 - 2004



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Gold	19.21	19.80	21.04	21.34	20.00	19.13	19.56	19.53	19.87	19.90	18.62	18.37	18.31	16.92	16.98
Coal	4.16	4.09	5.04	4.87	4.26	4.00	4.77	4.88	4.43	3.78	3.70	3.43	3.50	3.80	4.04
Platinum	4.41	3.69	5.09	6.12	5.49	10.55	12.17	9.42	9.60	8.90	7.12	8.95	7.02	6.60	7.14
Diamonds	5.29	6.54	7.18	7.25	7.83	8.62	5.94	5.95	4.90	4.61	5.14	9.04	5.20	3.37	3.54
Other mines	11.56	12.05	5.55	6.22	6.43	5.19	6.63	7.29	5.83	5.81	5.42	5.21	5.20	4.08	4.33

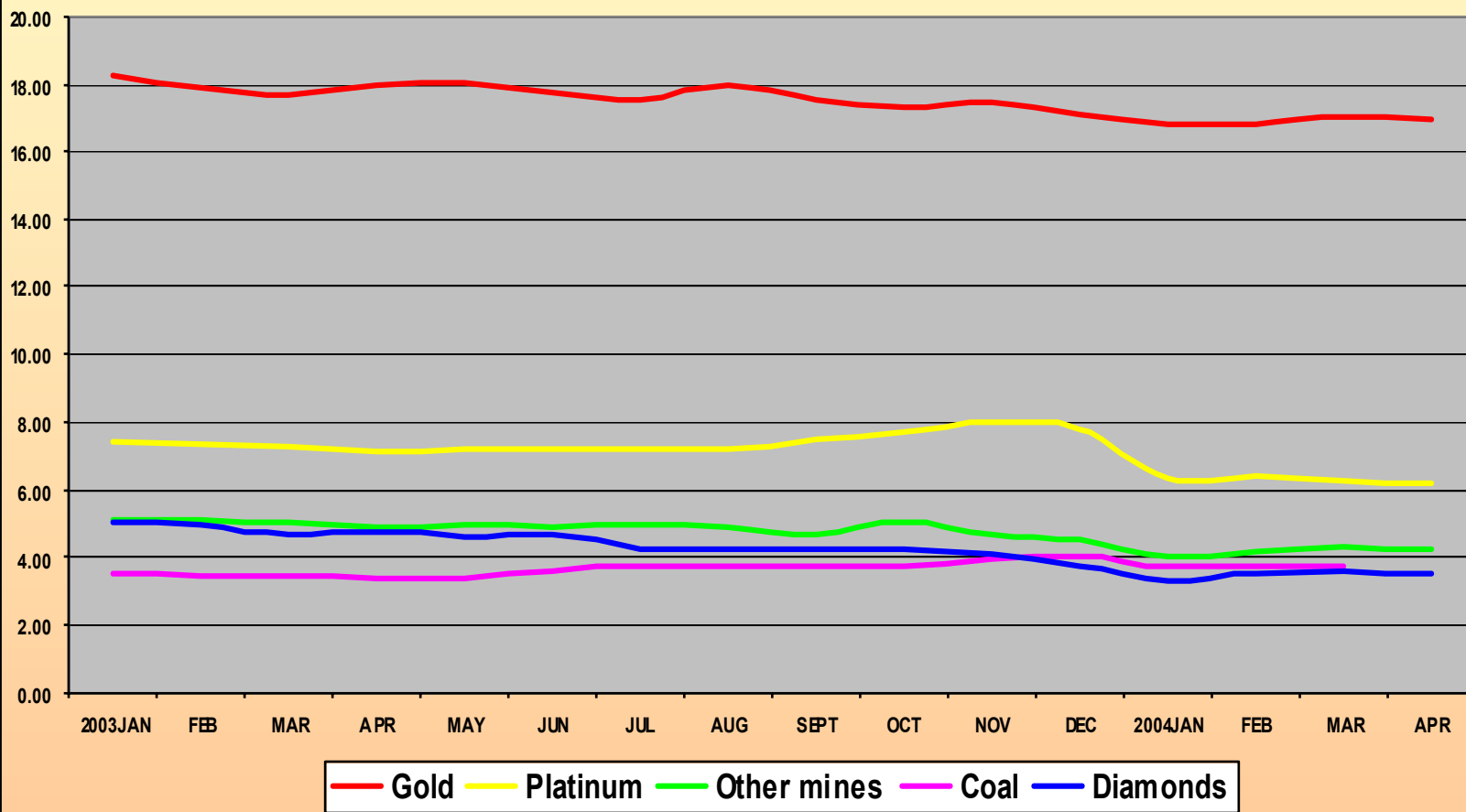


# RSA

## Main commodities

### Injury rates

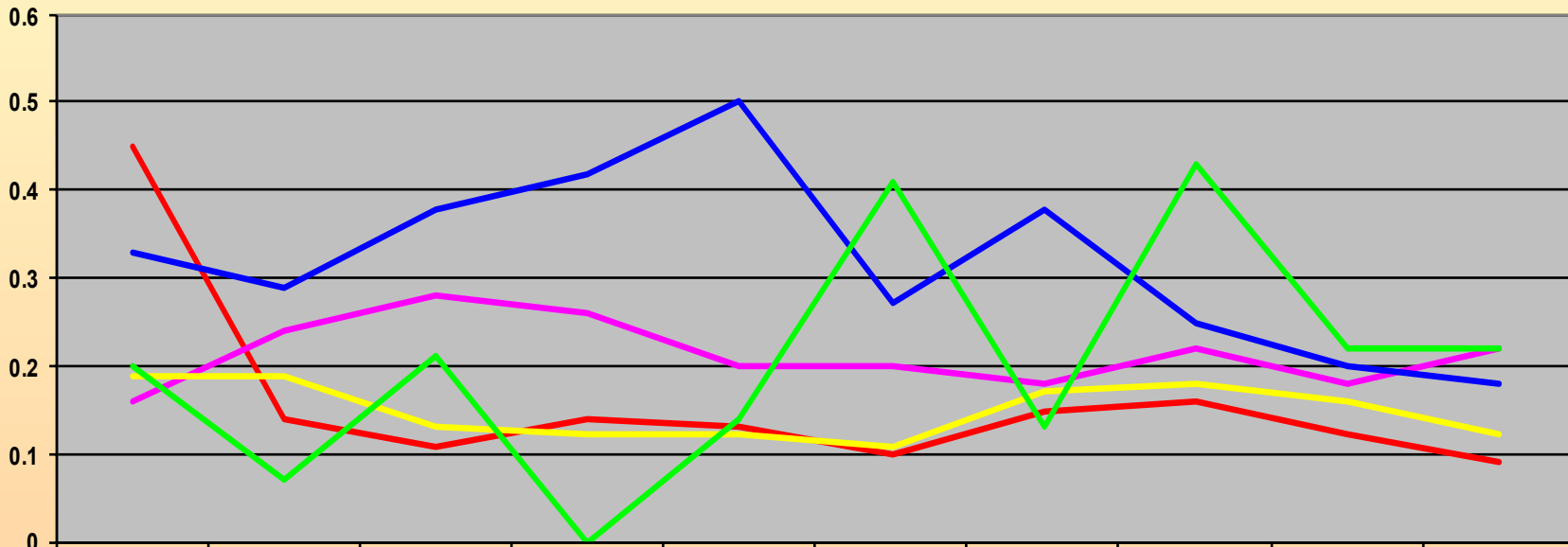
Jan 2003 - April 2004





# RSA

## Machinery and transportation and mining accidents Fatality rates 1995 - 2004



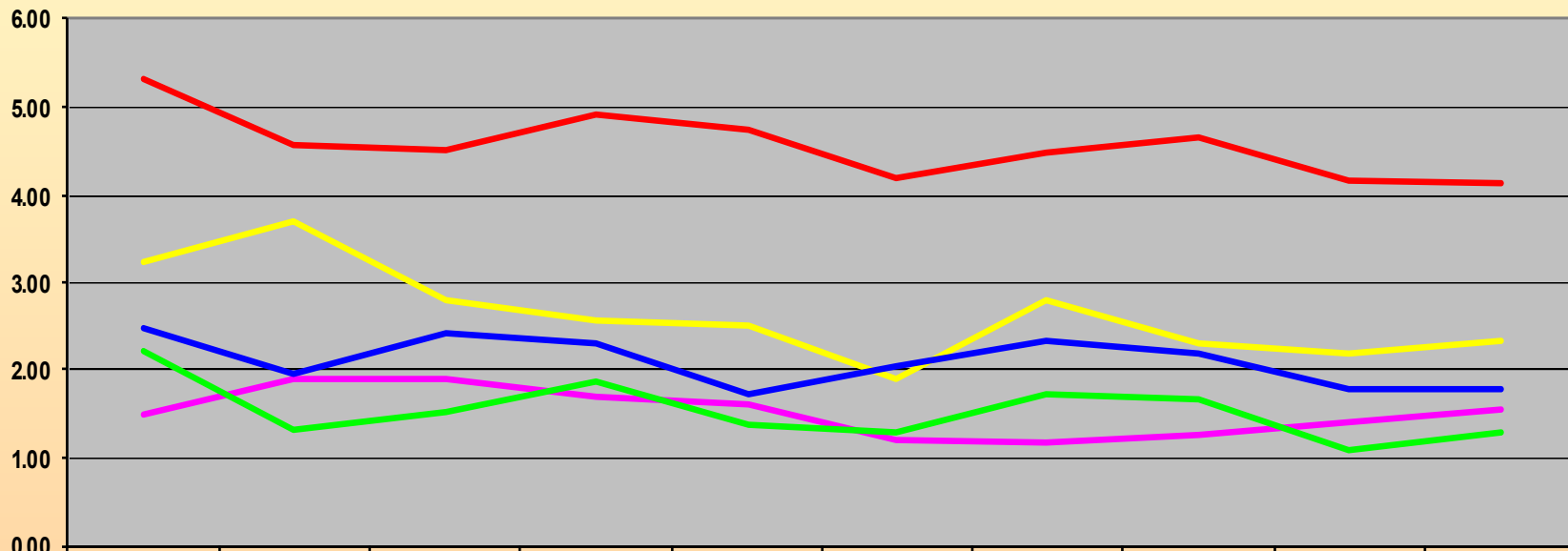
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Gold	0.45	0.14	0.11	0.14	0.13	0.10	0.15	0.16	0.12	0.09
Coal	0.16	0.24	0.28	0.26	0.20	0.20	0.18	0.22	0.18	0.22
Platinum	0.19	0.19	0.13	0.12	0.12	0.11	0.17	0.18	0.16	0.12
Other	0.33	0.29	0.38	0.42	0.50	0.27	0.38	0.25	0.20	0.18
Diamonds	0.20	0.07	0.21	0	0.14	0.41	0.13	0.43	0.22	0.22



# RSA

## Machinery and transportation and mining accidents

Injury rates 1995 - 2004



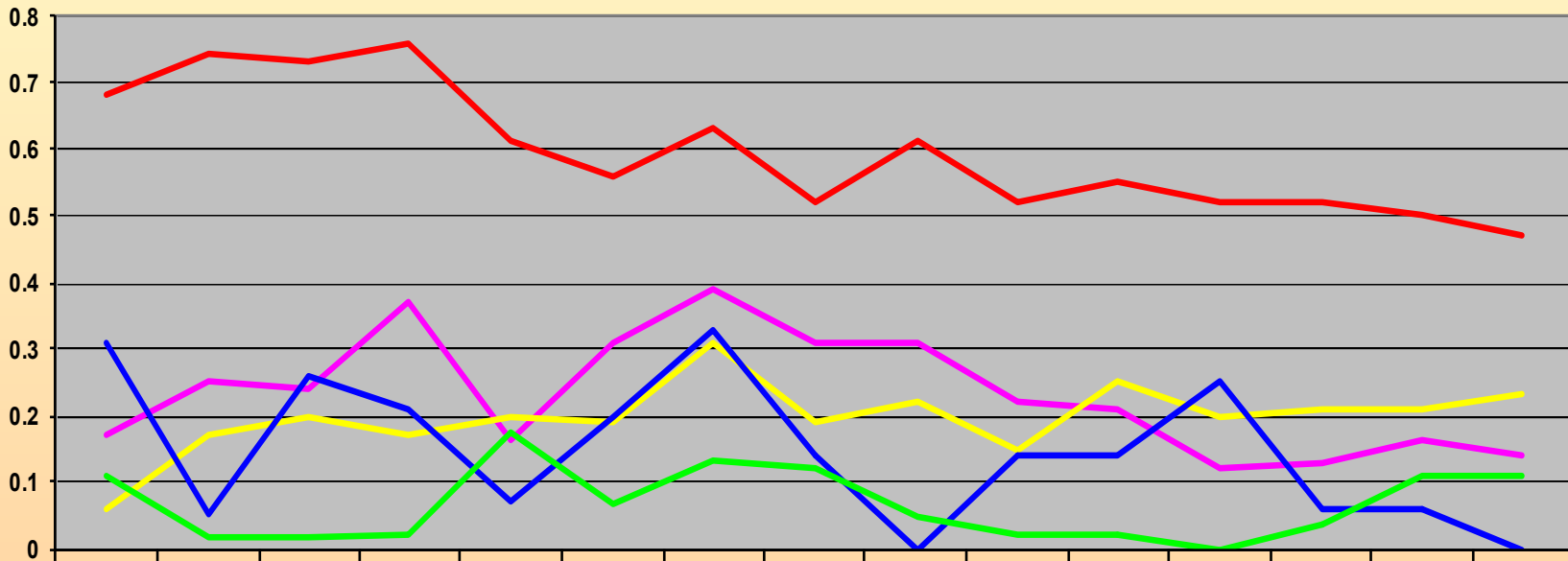
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Gold	5.30	4.57	4.50	4.91	4.73	4.19	4.48	4.65	4.16	4.13
Coal	1.48	1.88	1.90	1.70	1.59	1.19	1.17	1.26	1.40	1.55
Platinum	3.22	3.70	2.80	2.55	2.50	1.92	2.80	2.31	2.20	2.34
Diamonds	2.23	1.31	1.54	1.87	1.38	1.30	1.71	1.67	1.07	1.29
Other mines	2.49	1.96	2.41	2.30	1.72	2.03	2.35	2.17	1.78	1.76



# RSA

## Falls of ground

### Fatality rates 1990 - 2004

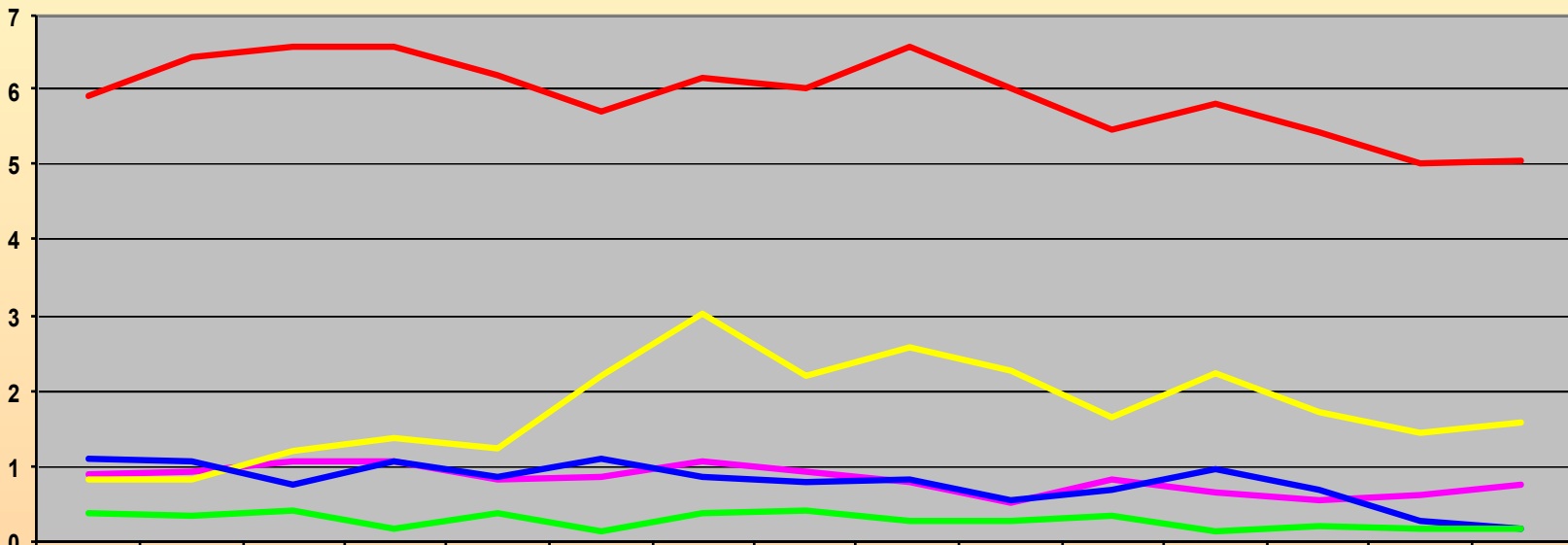


	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Gold	0.68	0.74	0.73	0.76	0.61	0.56	0.63	0.52	0.61	0.52	0.55	0.52	0.52	0.50	0.47
Coal	0.17	0.25	0.24	0.37	0.16	0.31	0.39	0.31	0.31	0.22	0.21	0.12	0.13	0.16	0.14
Platinum	0.06	0.17	0.20	0.17	0.20	0.19	0.31	0.19	0.22	0.15	0.25	0.20	0.21	0.21	0.23
Diamonds	0.31	0.05	0.26	0.21	0.07	0.20	0.33	0.14	0	0.14	0.14	0.25	0.06	0.06	0
Other mines	0.11	0.02	0.02	0.02	0.17	0.07	0.13	0.12	0.05	0.02	0.02	0.00	0.04	0.11	0.11



# RSA

## Falls of ground Injury rates 1990 - 2004



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Gold	5.92	6.41	6.59	6.58	6.19	5.70	6.18	6.02	6.59	6.04	5.47	5.80	5.45	5.03	5.06
Coal	0.89	0.92	1.04	1.05	0.83	0.87	1.06	0.92	0.78	0.49	0.82	0.65	0.54	0.61	0.76
Platinum	0.83	0.84	1.20	1.38	1.24	2.18	3.01	2.18	2.56	2.26	1.67	2.22	1.71	1.45	1.59
Diamonds	1.08	1.05	0.74	1.05	0.86	1.12	0.85	0.77	0.81	0.55	0.69	0.95	0.68	0.28	0.17
Other mines	0.36	0.32	0.40	0.18	0.35	0.11	0.35	0.38	0.24	0.28	0.34	0.13	0.19	0.16	0.18