

Landmines in Russia and the Former Soviet Union: A Lethal Epidemic

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Mines and UXOs, whether from past or present conflicts, continue to kill and maim people in Russia and the Former Soviet Union—mostly civilians and children—more than half a century after WWII ended. The ongoing conflict in Chechnya and other unresolved political conflicts have contributed to a severe mine crisis in the region. The most acute situation is seen in Chechnya, where partisan conflict has turned into an open "mine war" in which both sides have engaged. Russia continues demining operations both internally and abroad, but has procrastinated in ratifying the CCW Protocol II and is abstaining from the Mine Ban Treaty. Regional NGOs and civil society groups need to play a more important role in influencing political and socio-economic changes that can defuse the landmines crisis. [M&GS 2001;7:38-42]

Russia remains the biggest producer and user of antipersonnel landmines (APMs) † in the former Soviet Union (FSU), and continues its abstention from the Mine Ban Treaty (MBT). Of the 15 FSU nations, only five—Lithuania, Moldova, Ukraine, Tajikistan, and Turkmenistan—have signed the Treaty. Only the latter two have ratified it. The list of non-signatories includes Russia, the only AP mine producer in the region, as well as Armenia, Azerbaijan, and Georgia, which are all mine-affected countries.

World War II Casualties Continue to Mount

In the post-World War II period, demi-

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The decline in the number of cleared explosive devices in the early 1990s [see Table 1] reflects the worsening economic situation and shrinking of finances for demining purposes in Russia, and should not be

† Though Russia has not signed the Mine Ban Treaty or ratified Protocol II of the Geneva Convention on Conventional Weapons (CCW), it is a party to the CCW and has generally abided by the provisions of that treaty.

Table 1. Number of found and demined (destroyed) explosive devices (ED) in the Russian Federation from 1989 through 1998*.

Total number of ED	Artillery shells	Mortar bombs	Missiles	Grenades	Mines	Air bombs	Other
131 086	N/a	N/a	N/a	N/a	N/a	N/a	N/a
•							N/a
,							N/a
,				N/a	515		69,510
63,580	21,584	14,519	2,733	N/a	151	222	29,370
78,905	16,540	14,820	¹ 15	3,834	767	160	43,175
94,706	25,900	14,852	645	7,101	2,734	282	41,219
63,872	21,642	11,959	255	6,791	594	194	13,309
404,028	11,529	10,072	9,177	2,827	2,369	130	316,850
53,975	13,871	17,042	2,111	3,970	373	53	16,674
64,682,684	138,614	95,522	19,998	24,523	7,503	1,448	530,107
	of ED 131,086 175,808 112,258 115,490 63,580 78,905 94,706 63,872 404,028 53,975	of ED shells 131,086 N/a 175,808 N/a 112,258 N/a 115,490 27,584 63,580 21,584 78,905 16,540 94,706 25,900 63,872 21,642 404,028 11,529 53,975 13,871	of ED shells bombs 131,086 N/a N/a 175,808 N/a N/a 112,258 N/a N/a 115,490 27,584 12,258 63,580 21,584 14,519 78,905 16,540 14,820 94,706 25,900 14,852 63,872 21,642 11,959 404,028 11,529 10,072 53,975 13,871 17,042	of ED shells bombs 131,086 N/a N/a N/a 175,808 N/a N/a N/a 112,258 N/a N/a N/a 115,490 27,584 12,258 5,062 63,580 21,584 14,519 2,733 78,905 16,540 14,820 15 94,706 25,900 14,852 645 63,872 21,642 11,959 255 404,028 11,529 10,072 9,177 53,975 13,871 17,042 2,111	of ED shells bombs 131,086 N/a N/a N/a N/a 175,808 N/a N/a N/a N/a 112,258 N/a N/a N/a N/a 115,490 27,584 12,258 5,062 N/a 63,580 21,584 14,519 2,733 N/a 78,905 16,540 14,820 15 3,834 94,706 25,900 14,852 645 7,101 63,872 21,642 11,959 255 6,791 404,028 11,529 10,072 9,177 2,827 53,975 13,871 17,042 2,111 3,970	of ED shells bombs 131,086 N/a N/a N/a N/a 175,808 N/a N/a N/a N/a N/a 112,258 N/a N/a N/a N/a N/a 115,490 27,584 12,258 5,062 N/a 515 63,580 21,584 14,519 2,733 N/a 151 78,905 16,540 14,820 15 3,834 767 94,706 25,900 14,852 645 7,101 2,734 63,872 21,642 11,959 255 6,791 594 404,028 11,529 10,072 9,177 2,827 2,369 53,975 13,871 17,042 2,111 3,970 373	of ED shells bombs bombs 131,086 N/a N/a N/a N/a N/a 175,808 N/a N/a N/a N/a N/a N/a 112,258 N/a N/a N/a N/a N/a N/a 115,490 27,584 12,258 5,062 N/a 515 407 63,580 21,584 14,519 2,733 N/a 151 222 78,905 16,540 14,820 15 3,834 767 160 94,706 25,900 14,852 645 7,101 2,734 282 63,872 21,642 11,959 255 6,791 594 194 404,028 11,529 10,072 9,177 2,827 2,369 130 53,975 13,871 17,042 2,111 3,970 373 53

* Does not include explosive devices found and destroyed on the territory of Chechnya.

taken to indicate that there are few pieces of explosive ordnance remaining in the ground. Mines and UXOs continue to kill and maim people more than half a century after WWII ended. Between 1992 and 1998 there were 84 accidents within the territories of former World War II battlefields; 39 people died and 67 were wounded (50% of the casualties were children).2 In 1998 there were 13 mine incidents involving civilians; 13 people were killed, including eight children, and dozens were wounded. During the first half of 1999, three mine incidents involving civilians took place in which five people were killed, including one child; seven were wounded.1 The trend represented by these statistics is likely to continue for at least a few decades into the future.

Regional Dimensions of the Landmines Problem

Belarus and Ukraine

Since 1945, some 26 million pieces of UXO have been cleared from Belarus and the Ukraine by mobile engineer teams from the Belarus Armed Forces. The scale of the problem can be illustrated by UXO/mine clearance statistics [see Table 2].

In Ukraine, one of the most heavily mine-affected areas remains the Crimean peninsula, where thousands of tons of UXOs remain from WWII, and where the rate of mine victims is similar to that in Russia. In Transdnestria, thousands of landmines remain in the ground on the border with Moldova, while many times more—mainly the pressureactivated (PMN) type—are stockpiled and remain the sub-

ject of dispute among the Moldovian and Transdnestrian administrations and the commanders of the 40th Army of the Russian Federation.

The Tajik-Afghan border remains heavily mined, and some spots inside the country are infested with landmines. This situation is unlikely to change for the better without a solution to the ethnic and inter-clan conflicts in the region, as well as to the ongoing war in Afghanistan and the remaining tensions along the border. The recent conflict on the border between Kyrgyzstan and Uzbekistan, involving Kyrgyz forces and Islamists, is part of a long term struggle in which mines have been viewed as cheap and indispensable weapons in an economically underdeveloped area.

The Caucasus and Chechnya

In the Caucasus region, the ongoing conflict in Chechnya and the as yet unresolved conflicts in Nagorny-Karabakh and Abkhazia have led to a dramatic increase in tensions. These tensions, in turn, have contributed to a severe mine crisis in the region characterized by landmines that have already been laid and an ongoing "hidden" mine war in Abkhazia.

The most acute situation is seen in

Table 2. UXO/mine clearance statistics, Belarus, 1992-1999. Source: Belarus Country Report. Landmine Monitor Report. New York: Human Rights Watch. 2000.

Туре	1992	1993*	1994*	1995	1996	1997	1998	1999
APMs UXOs	28 18,733	1,220 57,443	347 84,985	50 7,527	182 10,521	108 6,396	250 4,704	289 10,437
Total	18,761	58,663	85,332	7,577	10,703	6,504	4,954	10,726

^{*} A substantial increase in the number of AP mines and UXOs cleared in 1993 and 1994 were a result of battlefield area clearance and "blanket clearance" operations conducted by the Belarus Armed Forces in that period.

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Chechnya, where partisan conflict has turned into an open war in which both sides use mine weaponry (See Tables 3 and 4). Extensive mine fields were "inherited" from the previous conflict (1994-1996), and during the period from the autumn of 1999 until now both sides have intensively used a wide variety of landmines on the territory of Chechnya and in adjacent areas.

With the declared end of the "combat phase" of the "counter-terrorist operation" and the upcoming related withdrawal of approximately two thirds of the Federal Armed Forces from Chechnya, an increase in mine use in Chechnya can be easily forecast: clearly the armed forces will compensate for the lack of personnel with a greater use of APMs for defensive purposes against Chechen militants. Moreover, though there are no documented cases of the violation by Federal Forces of CCW Protocol II limitations on the use of the most dangerous blast mines, trip-wired mines, and booby traps,† participants in combat actions, including members of reconnaissance teams, have confirmed verbally that such uses have occured. The Chechen militants do not abide by these limitations, nor have they mapped mined areas.

Solutions Require Political Will

The situation is bound to worsen. Effective solutions to the mine crisis in the region, including accession to the Mine Ban Treaty by Russia and the other FSU countries, will depend upon political resolutions of the conflicts in which mines are being used. Judging by present trends, this is going to be a complicated and long-term process.

Recent mine action efforts in Russia have been underscored by a growing understanding among both decision makers and the general public that putting an end to the carnage caused by these weapons is of the utmost importance. This political will has been manifested in official policy changes, in legislative activities, and in the work of NGOs, with the following results:⁴

Table 3. Casualties among the federal units in the Chechnya "mine war" [3]

	Military operations (Aug 1995– Jan 1996)	Military operations (Aug 1999– Jan 2000)
Personnel wounded Personnel killed	56 20	139 39
Damaged machinery (units)	32	94

- No violations have been reported so far of the five-year moratorium, launched on December 1, 1997, on the export of undetectable antipersonnel mines and those not equipped with self-liquidation mechanims;
- The production of the most insidious and inhumane types of antipersonnel mines—the "crater-type" mines—has been completely stopped; all accumulated stockpiles (more than half a million) of this type of APM have been eradicated.
- As they have become obsolete, 1.5 million APMs of different types have been completely eradicated by industries and domestic militaries.

Nevertheless, there are still acute stockpile destruction issues. Although large quantities of outdated landmines and other mines that did not meet CCW Protocol II requirements have already been destroyed, Russia still possesses 7 to 10 million blast mines (PFM-1 and PFM-1S) that are more than 20 years old, as well as 30-40 million more PMN-type mines. Judging by the scale of the problem and destruction rates during the past few years, Russia will not be able to meet the eight-year deadlines spelled out in the Protocol II requirements.

The destruction of PFM-1 and PFM-1S antipersonnel mines, which are designed to be delivered from helicopters or by artillery, and stockpiled PFMs, which are automatically armed after discharge from the canisters in which they are housed, and cannot be disarmed or dismantled prior to destruction, is highly complex. Moreover, the liquid explosive (VS-6D) contained in the PFM mines is extremely toxic and produces toxic gaseous byproducts while being burned. As a result of intensive research and development, a mobile device that can destroy mines in an efficient and environmentally sound manner has been created and tested. The national agencies and institutions involved in its design have expressed their interest in mass producing this device, which will require investments and donor activity.

Slow Stockpile Destruction

The slow destruction of Russia's stockpiles will continue in the near future with the elimination of 7 to 10 million PFM-1 mines banned by Protocol II—only a fraction of the

[†] The CCW bans the use of landmines with anti-handling devices, undetectable landmines, and all landmines without mechanisms for self-destruction or self-deactivation. The treaty also requires that all armed forces using landmines map all minefields.

Table 4. Summarized data on RCDM multi-profile hospital (MPH) and medical brigades (MB) operation in northern Caucasus (data on 15 January 2001).

	MPH-1,s* (Ordjonikid- zevsk)	MPH-2* (Grozny)	MPH-3,s* (Ordjonikid- zevsk)	MPH-4* (Nazran)	MB-1,2,3*	<u>Total</u>	
Medical assistance rendered							
(total population)	30,799	20,034	5,148	7,425	10,935	74,341	
 military personnel 	37	2,510	_	_	61	2,608	
- children	10,316	1,238	1,243	2,325	2,404	17,526	
Surgical procedures	6,891	3,739	1,318	1,620	2,549	16,217	
Mine/ UXOs and other fire-arms injuries)	362	547	10	_	55	974	
Total hospitalized	1,120	485	72	90	535	2,302	
- military	16	195		_	6	217	
- children	420	29	45	26	92	612	
Evacuated to hospitals outside Chechnya	65	45	15	114	_	239	

^{*} MPH-1 operated from 2 Oct. 1999 to 6 Apr. 2000; MPH-2 operated from 11 Feb. to 26 Sept. 2000; MPH-3 operated from 28 Sept. to 20 Oct. 2000; MPH-4 operated from 28 Oct. 2000; MB-1 operated from 1 Nov. to 15 Dec. 1999; MB-2 operated from 1 Nov. 1999 to 14 Feb. 2000; MB-3 operated from 19 Nov. 1999 to 15 Jan. 2000.

number that will need to be destroyed. A considerable portion of these PMN-type mines are stored in inappropriate conditions, can easily self-detonate, and pose a "time-delayed" risk to health and the environment. Almost every outdated cassette, containing from 68 to 72 PFM mines, leaks explosive substances, and a few mines have "self switched" to combat mode. New and safe destruction technologies and effective verification mechanisms, along with realistic and transparent destruction plans should be applied and financial resources, including funds from international sources, should be raised as soon as possible.

Demining

Russia continues demining operations both internally and abroad. In Bosnia and Herzegovina, more than 15.000 explosive devices have been removed; in Kosovo, more then 25,000; in the Georgian-Abhaz zone of conflict, 25,000; in Tadjikistan, about 35,000; in Chechnya, 10,000. These efforts are not nearly enough: they lag far behind the rates at which new mines are being placed, and represent only a fraction of already planted mines. Humanitarian demining operations outside Russia meet UN standards; in Russia itself, demining activities lack standardization, verification, and control mechanisms. They cannot be regarded as humanitarian, and the scale on which they take place is inadequate.

The Role of Civil Society

So despite some positive trends, significant challenges remain. Russia has procrastinated in ratifying the CCW Protocol II. It has continued the wide-scale use of mines. The self-destruct features of even "sophisticated" APMs fail as much as half the time. There are huge mine-affected territories in both urban and agricultural areas. Government agencies are operating without humanitarian demining standards and they lack finances. There is little effective national or local legislation to support assistance for mine victims or mine awareness programs. These are just a few of the problems.

Regional non-governmental organizations and civil society groups need to play a more important role in influencing broad political and socio-economic changes in their countries and regions. Among other things, representatives of civil society can help expand the expert working group on the landmines issue at the regional level, can facilitate the accumulation and systematization of landmine-related data, can help mobilize public opinion, and can facilitate the development of effective programs for mine awareness and for mine victim assistance, rehabilitation, and re-integration.

Despite all the challenges lying ahead, the situation is not hopeless. Russia and the FSU have a unique and complicated history, culture, and psychology. The region is plagued by conflict, poverty, and other hardships. The institutions of civil society are not well developed, bureaucracy is rampant,

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rhythms of change are slow, expression is not completely free, and the discussion of sensitive issues-such as the abolition of landmines and other weapons—is quite controversial. Working within this environment to develop a landmines campaign and to contribute to the global efforts to rid the world of AP mines has often been difficult. NGOs have faced political, bureaucratic, and cultural obstacles to their organizing activities. Nonetheless, these coalition activities have already produced some important results. Only the coordinated efforts of governmental and non-governmental actors can lead to a systematic, balanced, consistent, and comprehensive approach to the lethal epidemic of landmines.

References

- 1. Russian Physicians for the Prevention of Nuclear War. Landmines: outlook from Russia. Moscow: RPPNW. 1999.
- 2. **Kudinov S.** Presentation to Russian National Corps of Emergent Humanitarian Direct Action. Moscow. 27 May 1998.
- 3. **Serdtsev NI**. Anti-terrorist operation in Caucasia: main lessons and conclusions. High authorities of the Armed Forces of Russia round-table discussion. Military Intentions 2000;4:20-24.
- 4. Malov A. Presentation by Counsellor of the Department of Security, Arms Control and Disarmament, Russian Federation Ministry of Foreign Affairs. December 2000.