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A Humanitarian Crisis at the Border:

New Estimates of Deaths Among Unauthorized Immigrants

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For almost a decade now, there has been an unprecedented increase in the number of deaths each year among unauthorized border-crossers in the deserts and mountains of southern Arizona. The official statistics compiled by the U.S. Border Patrol consistently undercount the actual number of deaths in Arizona and elsewhere along the U.S.-Mexico border. But various academic and government studies estimate that the bodies of between 2,000 and 3,000 men, women, and children have been found along the entire southwest border since 1995, including at least 1,000 in the inhospitable terrain of southern Arizona. Experts, including the U.S. Government Accountability Office (GAO), now explain this crisis as a direct consequence of U.S. immigration-control policies instituted in the mid-1990s.¹

The Binational Migration Institute (BMI) of the University of Arizona's Mexican American Studies and Research Center has undertaken a unique and scientifically rigorous study of all unauthorized border-crosser (UBC) deaths examined by the Pima County Medical Examiner's Office (PCMEO) from 1990-2005.² [[Read the complete BMI study](#)] Because the PCMEO has handled approximately 90 percent of all UBC recovered bodies in the U.S. Border Patrol's Tucson Sector, an analysis of such deaths serves as an accurate reflection of the major characteristics of all known unauthorized border-crosser deaths that have occurred in this sector since 1990.

A reliable analysis of known deaths among unauthorized border-crossers in the Tucson Sector is important for many reasons. Most important is the fact that, according to available figures produced by the U.S. government and the academic

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Embajada de México en Estados Unidos
Oficina de Prensa

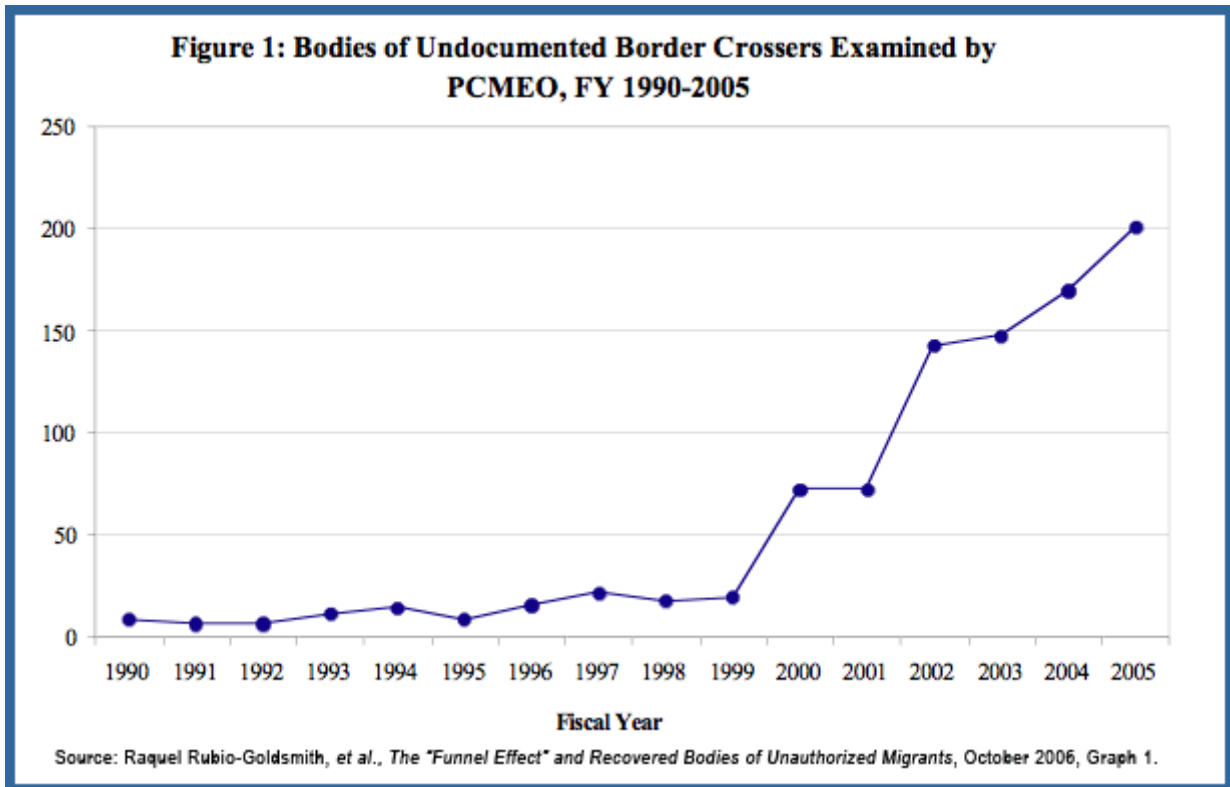
community, a comparison of the totals of such deaths for each of the nine Border Patrol sectors along the U.S.-Mexico border shows that the Tucson Sector has been the site of the vast majority of known UBC deaths in the new millennium. The results of the BMI study, which are confirmed by comparable research, show that there has been a dramatic increase in the number of UBC recovered bodies in the Tucson Sector from 1990 to 2005, thereby creating a major public health and humanitarian crisis in the deserts of Arizona.

The “Funnel Effect”

In the mid-1990s, the U.S. government implemented a “prevention through deterrence” approach to immigration control that has resulted in the militarization of the border and a quintupling of border-enforcement expenditures. However, the new border barriers, fortified checkpoints, high-tech forms of surveillance, and thousands of additional Border Patrol agents stationed along the southwest border have not decreased the number of unauthorized migrants crossing into the United States. Rather, the new strategy has closed off major urban points of unauthorized migration in Texas and California and funneled hundreds of thousands of unauthorized migrants through southern Arizona’s remote and notoriously inhospitable deserts and mountains.³

The BMI study was designed specifically to measure this “funnel effect” created by U.S. immigration-control policies. The BMI study found that there has been an exponential increase in the number of UBC recovered bodies handled by the PCMEO from 1990 to 2005 {Figure 1}. Over this period of time, the PCMEO has examined the bodies of 927 unauthorized border-crossers, which, according to the GAO, account for at least 78 percent of the unprecedented increase in known UBC deaths along the entire southwest border of the United States from 1990-2003.⁴

Informe de Monitoreo
Embajada de México en Estados Unidos
Oficina de Prensa



BMI's findings unambiguously confirm previous evidence that U.S. border-enforcement policies did create the funnel effect and that it is indeed the primary structural cause of death for thousands of unauthorized men, women, and children from Mexico, Central America, and South America who have tried to enter the United States. During the "pre-funnel effect" years (1990-1999), the PCMEO handled, on average, approximately 14 UBC recovered bodies per year. In stark contrast, during the funnel effect years (2000-2005), on average, 160 UBC recovered bodies were sent to the PCMEO each year. Over 80 percent of the unauthorized border-crosser bodies handled by the PCMEO have been under the age of 40, and there is a discernable, upward trend in the number of dead youth under the age of 18. There also has been a statistically significant decrease in the number of recovered bodies of unauthorized border-crossers from northern Mexico and a significant increase in the number of such decedents from central and southern Mexico.

A Humanitarian Crisis

The rising number of unauthorized border-crosser deaths along the U.S.-Mexico border coinciding with intensified militarization and fortification of the border has long been decried by national and international human rights and humanitarian-aid groups, among others. In the summer of 2006, then-Senate Majority Leader

Informe de Monitoreo
Embajada de México en Estados Unidos
Oficina de Prensa

Bill Frist (R-TN) referred to it as a “humanitarian crisis.” Researchers at the Centers for Disease Control and Prevention (CDC) have concluded that it is “emerging as a major public health issue.”⁶

Professor Wayne Cornelius, a leading scholar of immigration issues at the University of California, San Diego, estimates that the bodies of 2,978 unauthorized border crossers were recovered on U.S. soil from 1995-2004.⁷ Cornelius describes the body count in these terms: “To put this death toll in perspective, the fortified US border with Mexico has been more than 10 times deadlier to migrants from Mexico during the past nine years than the Berlin Wall was to East Germans throughout its 28-year existence.”⁸ And there is no indication that the massive amount of suffering and death along the U.S.-Mexico border will come to an end any time soon. According to the GAO, for instance, there were more deaths along the border in the first 9 months of 2006 (291) than in the first 9 months of 2005 (241).⁹

Primarily due to methodological limitations, however, previous research does not provide a fine-grained portrayal of such deaths in Arizona or elsewhere. Furthermore, other studies were not specifically designed to test the structural correlation between the funnel effect created by U.S. immigration-control policies and the increase in known migrant deaths in Arizona. No previous research focuses on the UBC recovered bodies processed by the overburdened PCMEO, which is conservatively estimated to have handled more than 90 percent of all the recovered bodies of unauthorized border crossers in the Border Patrol’s Tucson Sector, the site of the vast majority of such known deaths since 1995.¹⁰

Border Deaths are Undercounted

Of all the published counts of unauthorized border-crosser bodies recovered across the U.S.-Mexico border, official U.S. Border Patrol figures are the least inclusive, resulting in the smallest reported totals year after year. A GAO comparison of yearly totals from 2002-2005 produced by PCMEO and the Border Patrol for all known UBC deaths occurring in Pima County, Arizona, reveals serious discrepancies. In the GAO’s estimation, the Border Patrol undercounted known deaths in 2002 by 44 (32 percent), in 2003 by 56 (43 percent), and in 2004 by 46 (35.4 percent). According to the GAO, when the Border Patrol started to more fully integrate PCMEO data in 2005, they only undercounted known UBC deaths in Pima County by 1.¹¹ However, the GAO’s finding for 2005 is questionable. A review of medical-examiner records by the *Arizona Daily Star*, for instance, produced an estimate of UBC deaths for all of Arizona in 2005 (221) that was significantly higher than the Border Patrol’s total count for the state (172).¹²

Informe de Monitoreo
Embajada de México en Estados Unidos
Oficina de Prensa

The inaccuracy of Border Patrol figures appears to be primarily a consequence of a very narrow set of criteria for classifying a death as a UBC death. In general, a death is included in the Border Patrol count only if it: 1) occurs during the furtherance of an illegal entry; 2) occurs within the Border Safety Initiative (BSI) “target zone” (which includes 45 counties on or near the U.S.-Mexico border—or 9 of the 20 Border Patrol sectors); and 3) occurs outside of the BSI target zone, but the Border Patrol was directly involved in the case.

Each of these criteria necessarily results in an undercount of known UBC deaths. First, determining when an unauthorized border-crosser has reached his or her destination and is no longer in furtherance of an illegal entry can be very difficult to ascertain. It can actually take some unauthorized migrants many months and many stopovers in various places before they reach their final destinations. Some even take on short-term employment in one location—as agricultural workers, for instance—before settling in another location. This limitation also excludes unauthorized migrants who reside in the United States, but who still, on occasion, travel back and forth across the U.S.-Mexico border.

Second, the Border Patrol also omits known UBC deaths by restricting their count to cases occurring within the BSI target zone or those in which the Border Patrol has been directly involved. As a result, for example, many of the UBC bodies recovered by tribal officials on Tohono O’odham lands southwest of Tucson have not been counted by the Border Patrol. It has been estimated that almost two-thirds of Arizona’s crossing fatalities in 2002 occurred within the boundaries of the Connecticut-sized reservation of the Tohono O’odham nation.¹³

Serious researchers who attempt to estimate the number of unauthorized border crossers who have died point out that the actual number of migrant deaths is, at present, unknowable. Most assume that there are actually far more deaths than have been discovered, especially given the relative invisibility and covert circumstances of deaths that occur in the remote, inhospitable areas. The Border Patrol, on the other hand, suggests that most UBC deaths ultimately are discovered. However, the Border Patrol’s logic regarding this issue is problematic given the history of its own counts.

The BMI Study

As a step towards improving the accuracy of available data on unauthorized border-crosser deaths, BMI has undertaken an analysis of computerized and hardcopy autopsy reports recorded by the PCMEO. To the best of our knowledge, the BMI study is the first in-depth analysis of autopsy reports produced by a medical examiner’s office over a long enough period of time (1990-2005) to allow a scientific assessment of how the nature and character of such deaths have

Informe de Monitoreo
Embajada de México en Estados Unidos
Oficina de Prensa

changed since the implementation of prevention-through-deterrence border-enforcement policies in the mid-1990s.

BMI classified a decedent as an unauthorized border-crosser if he or she met a convincing combination of some or all of the following criteria as established by various authorities: lacked a U.S. Social Security number, lacked a permanent U.S. place of residence, Hispanic ethnicity, foreign-born, foreign nationality, foreign residency, foreign next of kin, died while in transit from Mexico to a destination in the United States, body located in a well-known migrant corridor or found with or reported by other unauthorized border-crossers, lacked a lawful U.S. immigration status, and/or possessed personal effects or documents typical of an unauthorized border-crosser (e.g., water jugs, U.S. or foreign currency, hygiene products, extra clothing, phone cards, phone numbers or addresses of contacts in a foreign country, a backpack).

Research and Reform

Until research along the lines of the BMI study is conducted elsewhere along the U.S.-Mexico border, our knowledge of the full impact of the funnel effect will be incomplete. Moreover, available statistics will continue to significantly underestimate the number of fatalities correlated with U.S. immigration-control practices along the border. The Border Patrol in particular needs to expand its criteria for classifying UBC recovered bodies. The current criteria exclude many known deaths along the border as well as in the U.S. interior.

Unauthorized migration into the United States is the result of many factors: modern-day forces of globalization, economic disparities, binational economic arrangements between the United States and Mexico such as NAFTA, and the long, complicated historical relationship between these two adjacent nations. Nonetheless, U.S. immigration-control policies clearly play a significant role in determining the places where unauthorized border crossers attempt to enter the country. According to Border Patrol statistics, for instance, in 1991, prior to the start of prevention-through-deterrence immigration-control operations, only 1 out of every 19 Border Patrol apprehensions occurred in the Tucson Sector. By 2004, in contrast, Tucson accounted for 1 out of every 2.36 apprehensions.¹⁴

The best chance of reducing the number of unauthorized border-crossers entering the United States does not lie with misconceived border-control measures. Many years worth of research now makes it perfectly clear that the underlying logic of the current border-enforcement system is to eventually scare off would-be unauthorized border crossers via seemingly predictable, if unacceptable, levels of injury, suffering, and death for those who dare try. Rather, the solution is comprehensive immigration reform rooted in an honest assessment of the role of

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Embajada de México en Estados Unidos
Oficina de Prensa

migrant labor in the United States as well as the forces of globalization in North America, Central America, and South America.

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Read the complete BMI study

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Endnotes

¹ U.S. Government Accountability Office, *Illegal Immigration: Border-Crossing Deaths Have Doubled Since 1995; Border Patrol's Efforts to Prevent Deaths Have Not Been Fully Evaluated* (GAO-06-770), August 2006, p. 7-9; Douglas S. Massey, Jorge Durand & Nolan J. Malone, *Beyond Smoke and Mirrors: Mexican Immigration in an Era of Economic Integration*. New York, NY: Russell Sage Foundation, 2002, Chapter 6.

² Raquel Rubio-Goldsmith, M. Melissa McCormick, Daniel Martinez & Inez Magdalena Duarte, *The "Funnel Effect" and Recovered Bodies of Unauthorized Migrants Processed by the Pima County Office of the Medical Examiner, 1990-2005 (Report Submitted to the Pima County Board of Supervisors)*. Tucson, AZ: Binational Migration Institute, Mexican American Studies and Research Center, University of Arizona, October 2006.

³ Douglas S. Massey, et al., 2002, Chapter 6; Wayne A. Cornelius, "Controlling 'Unwanted' Immigration: Lessons from the United States, 1993-2004," *Journal of Ethnic and Migration Studies* 31(4), July 2005: 775-794.

⁴ U.S. Government Accountability Office, August 2006, p. 17.

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⁶ Sanjeeb Sapkota, et al., "Unauthorized border crossings and migrant deaths: Arizona, New Mexico, and El Paso, Texas, 2002-2003," *American Journal of Public Health* 96(7), July 2006: 1282.

⁷ Wayne A. Cornelius, July 2005, p. 784.

⁸ *ibid.*, p. 783.

⁹ U.S. Government Accountability Office, August 2006, p. 16.

¹⁰ According to BMI's analysis of PCMEO UBC autopsy reports for 2005, for instance, 93 percent (201) of all known UBC recovered bodies in the Tucson Sector for that year (216) were processed by the PCMEO.

¹¹ U.S. Government Accountability Office, August 2006, p. 14.

¹² Eric Swedlund, *Arizona Daily Star*, March 30, 2006.

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Informe de Monitoreo
Embajada de México en Estados Unidos
Oficina de Prensa

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¹⁴ TRAC Immigration Project (<http://trac.syr.edu/immigration/>), “Southern Border Apprehensions vs. Staffing,” 2006; Arthur H. Rotstein, “More Border Crossers Use Sasabe Corridor,” *Arizona Daily Star*, March 11, 2006.