

# HIV Prevention among Injection Drug Users

Strengthening U.S. Support for Core Interventions

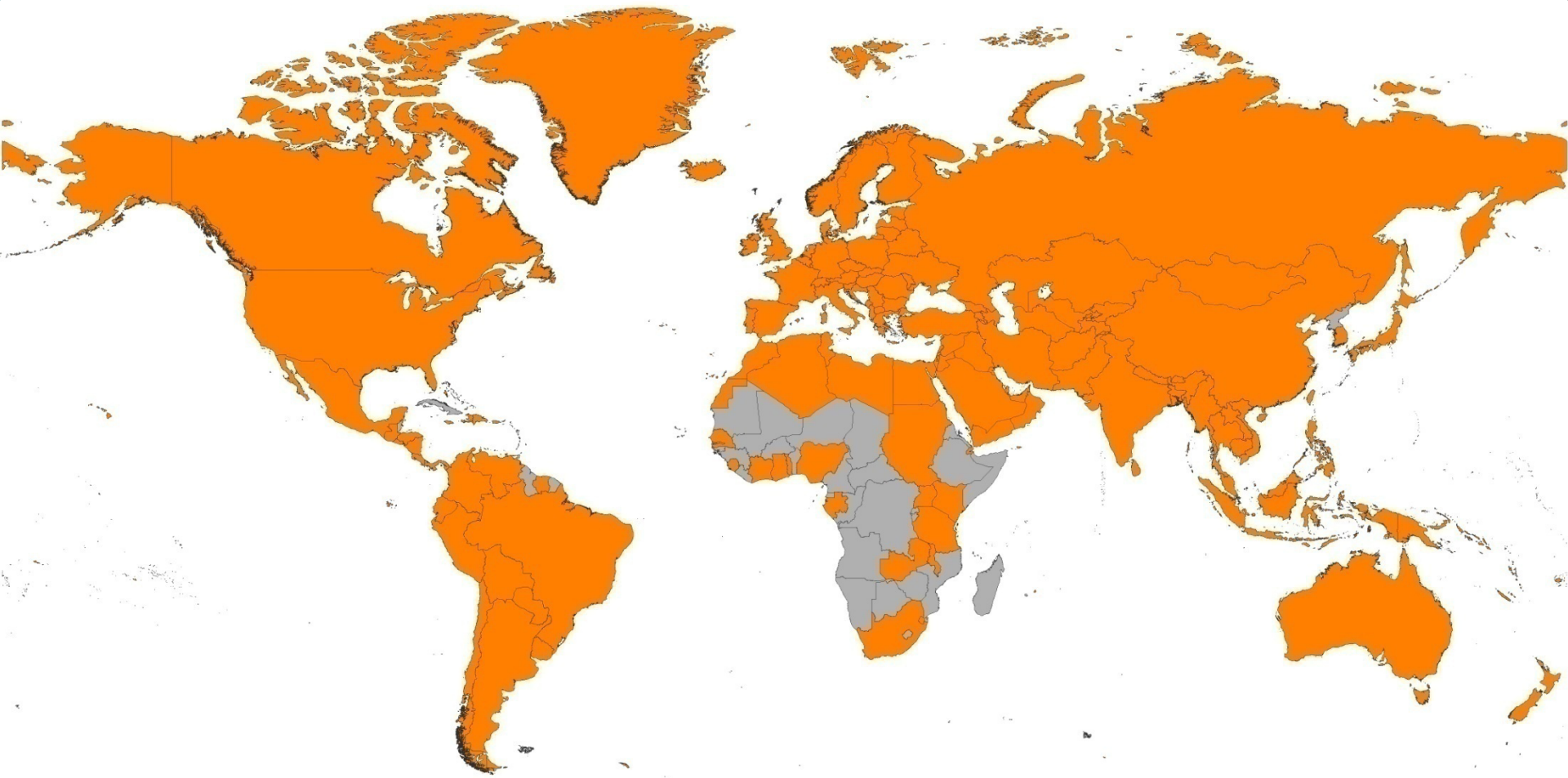
*Richard H. Needle, PhD, MPH*

*Lin Zhao, PhD candidate (UCSF School of Nursing)*

CSIS Africa Program Roundtable

June 10, 2010

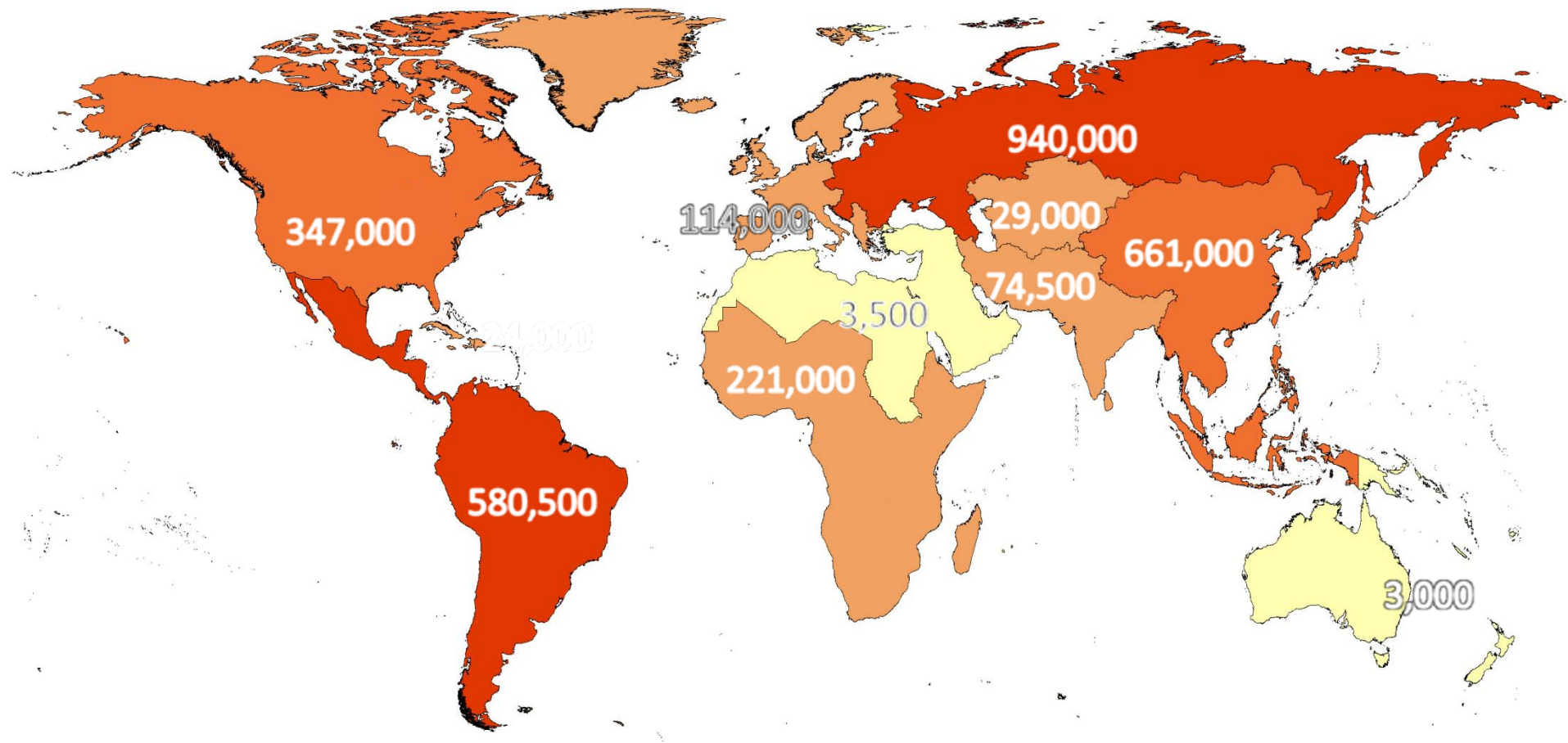
# Reports of injecting drug use in **151** countries



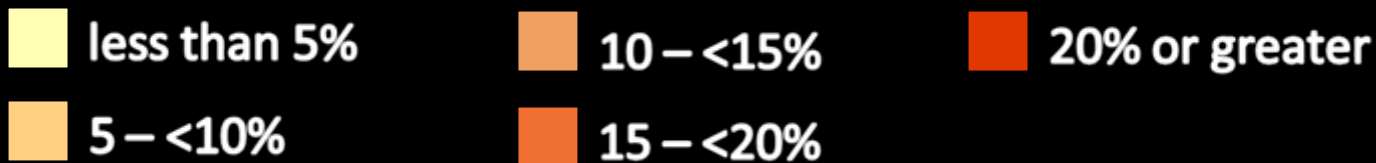
Global estimate of the number of IDUs:

**15.9 million (11.0-21.2 million)**

# 3 million (0.8-6.6 million) IDUs living with HIV



Weighted, regional HIV prevalence among IDUs:



Mathers: UN Reference Group on HIV and IDUs



# HIV among IDUs in PEPFAR Countries

- 5.3 million IDUs
- 800,000 IDUs living with HIV

\*Malaysia is not a PEPFAR country



# Methodology

# Data Sources

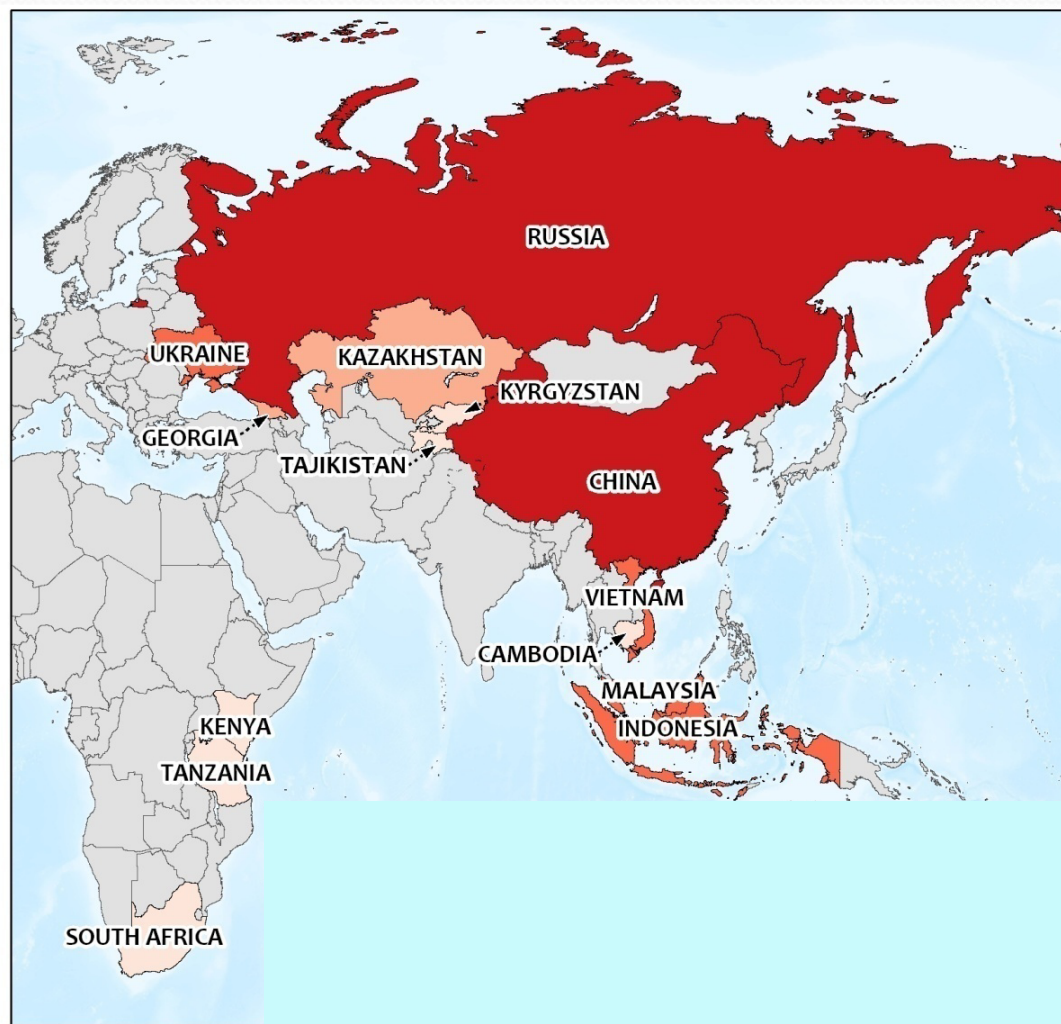
- Database search: Medline at Pubmed, Google, WHO/UNODC/UNAIDS/PEPFAR reports and county level official reports
- Country focal expert responses to a survey instrument
  - The instrument is composed of two parts and contains a total of 27 questions

Epidemiological	Programmatic
<ul style="list-style-type: none"><li>•Estimated size of IDU population</li><li>•Prevalence of HIV infection among IDUs</li></ul>	<ul style="list-style-type: none"><li>•Availability</li><li>•Accessibility</li><li>•Quality</li><li>•Coverage</li></ul>

# Epidemiological Findings



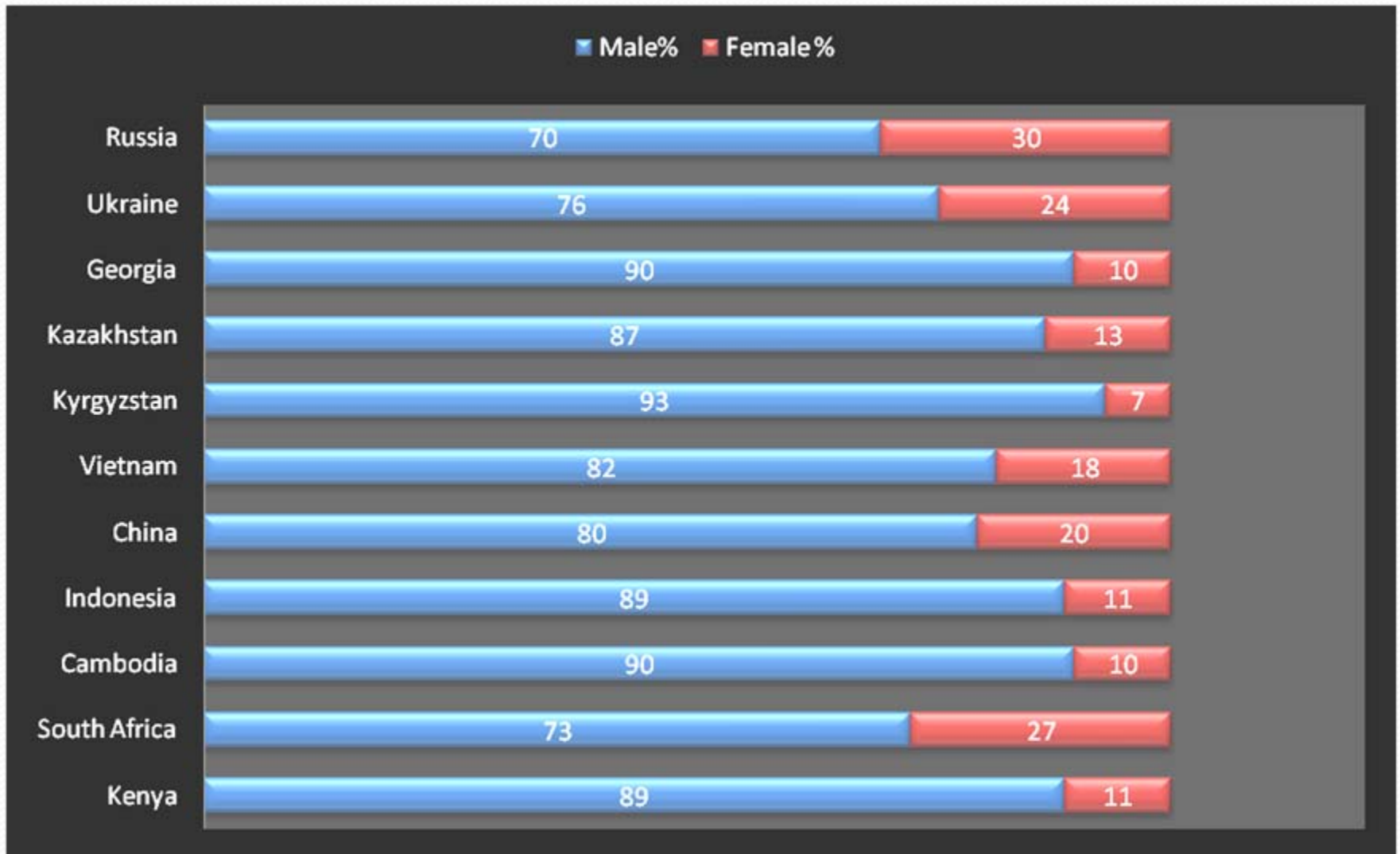
# Number of IDUs in PEPFAR Countries



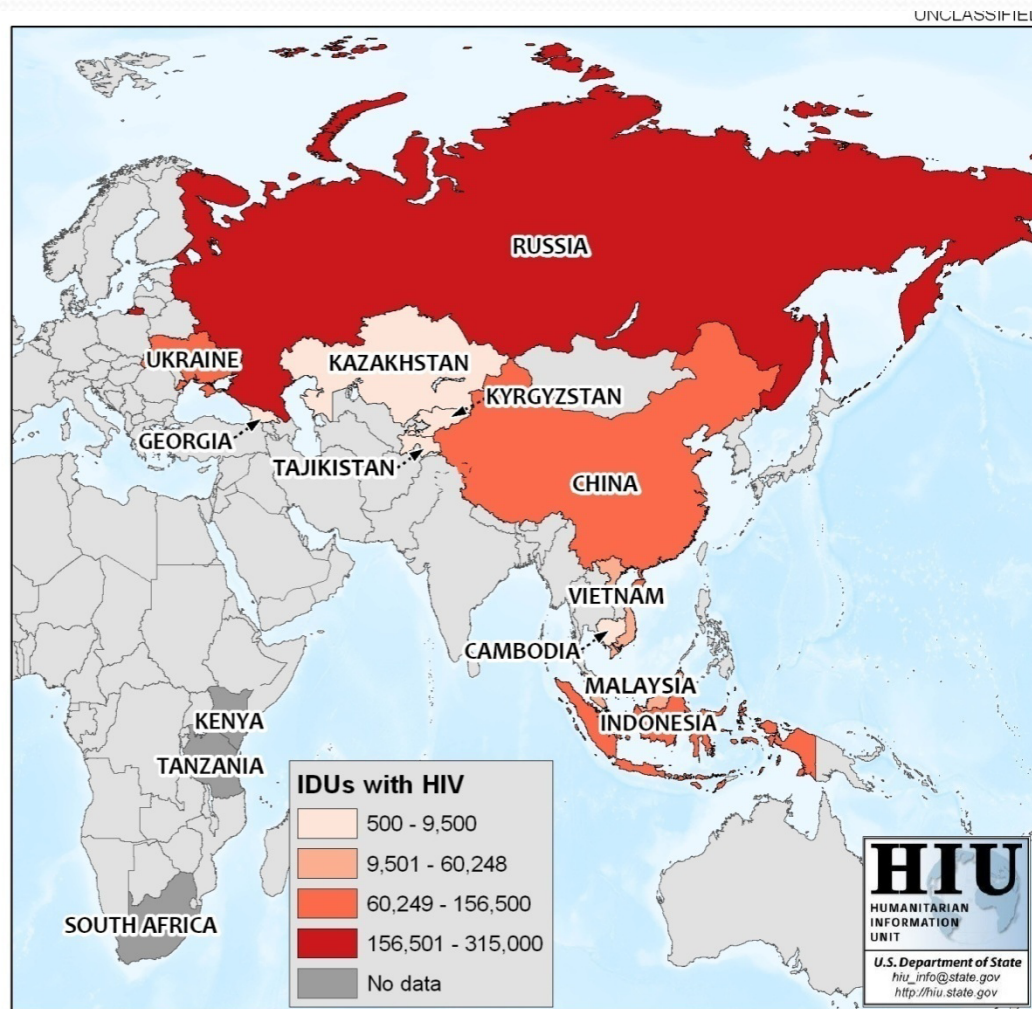
Country	IDUs
Central Asia and Eastern Europe	
Georgia	80,000
Kazakhstan	122,850
Kyrgyzstan	4,398
Russia	1,825,000
Tajikistan	20,000
Ukraine	229,000
Southeast Asia	
Cambodia	2,025
China	2,350,000
Indonesia	237,057
Malaysia	195,000
Vietnam	200,000
sub-Saharan Africa	
Kenya	30,000
South Africa	16,000
Tanzania	25,000



# Gender Distribution of Injection Drug Use



# Number of IDUs living with HIV/AIDS



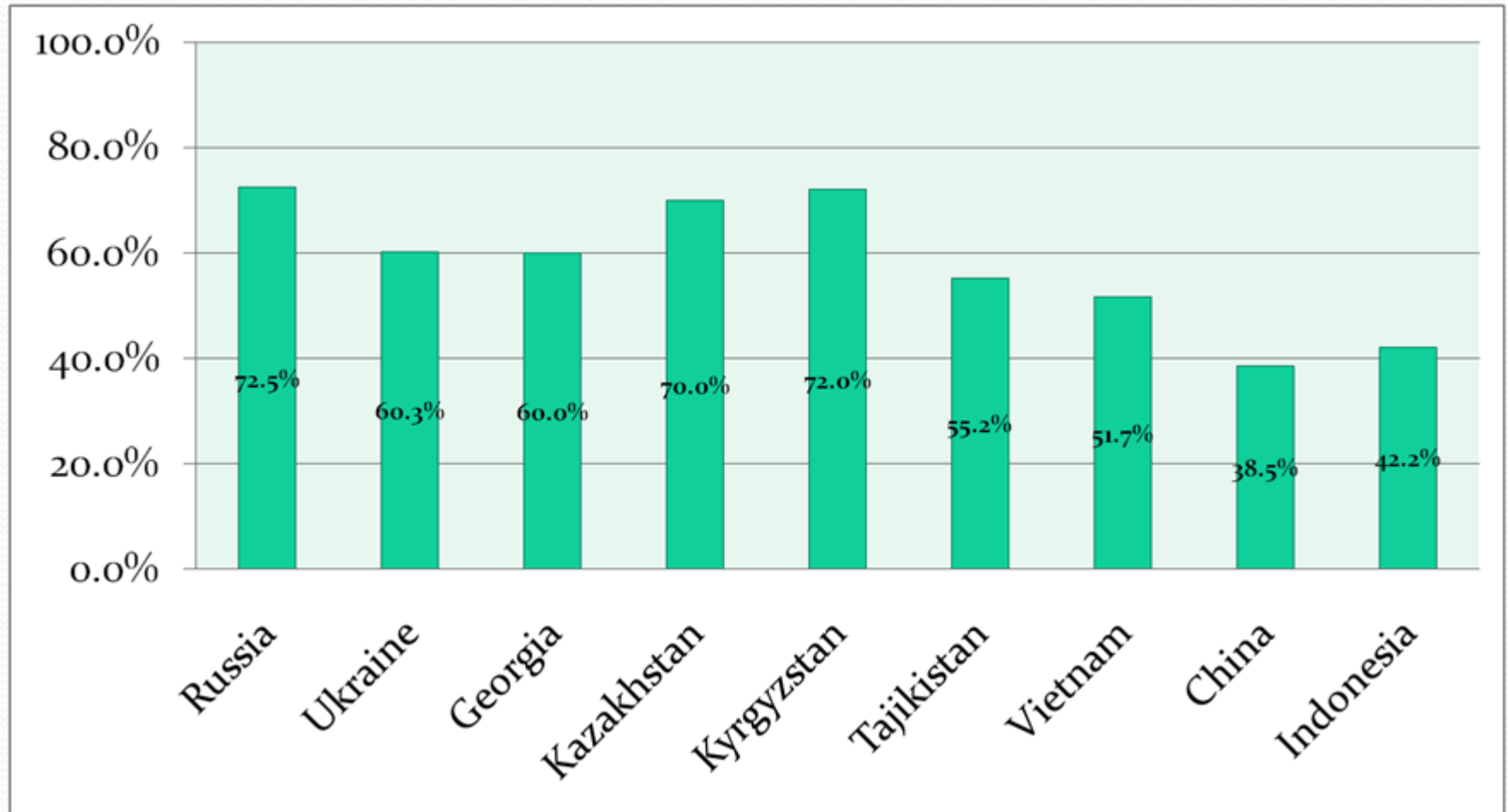
Boundary representation  
is not necessarily authoritative

Source: Needle and Zhao. 2010. HIV Prevention among Injection  
Drug Users. Center for Strategic and International Studies.

May 25, 2010  
U198 STATE (HIU)

Country	IDUs with HIV
Central Asia and Eastern Europe	
Georgia	1,291 <sup>R</sup>
Kazakhstan	9,500 <sup>E</sup>
Kyrgyzstan	3,200 <sup>E</sup>
Russia	315,000 <sup>R</sup>
Tajikistan	786 <sup>R</sup>
Ukraine	156,500 <sup>E</sup>
Southeast Asia	
Cambodia	500 <sup>E</sup>
China	88,798 <sup>E</sup>
Indonesia	94,500 <sup>E</sup>
Malaysia	60,248 <sup>E</sup>
Vietnam	59,890 <sup>E</sup>
sub-Saharan Africa	
Kenya	No data
South Africa	No data
Tanzania	No data

# HIV Cases Attributable to IDU Transmission



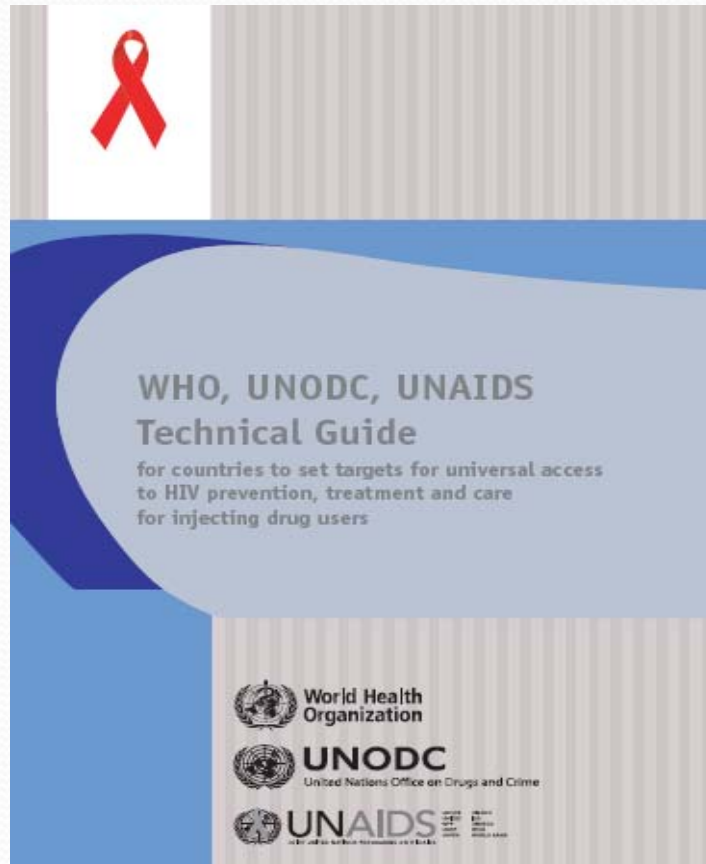
Cambodia, Tanzania, Kenya, and South Africa do not have data available.

# **Core Intervention Coverage and COSTs For Scaling-up**



# Evidence-based Comprehensive Package of Interventions

(WHO, UNODC, UNAIDS, 2009)



1. **Needle and syringe programmes (NSPs)**
2. **Opioid substitution therapy (OST) and other drug dependence treatment**
3. **Antiretroviral therapy (ART)**
4. HIV testing and counselling (T & C)
5. Prevention and treatment of sexually transmitted infections (STIs)
6. Condom programmes for IDUs and their sexual partners
7. Targeted information, education and communication (IEC) for IDUs and their sexual partners
8. Vaccination, diagnosis and treatment of viral hepatitis
9. Prevention, diagnosis and treatment of tuberculosis (TB).

# Coverage Targets

- WHO/UNODC/UNAIDS technical guide
  - Estimate that 60% IDUs inject opioids
  - Coverage

	% of IDUs regularly reached by NSP	% of Opioid Injectors on MAT
Lower	$\leq 20\%$	$\leq 20\%$
Medium	$<20\text{-} \leq 60\%$	$<20\text{-} \leq 40\%$
High	$>60\%$	$>40\%$

# NSP Coverage for IDUs

Country	Estimated Number of IDUs	Syringe Distribution per Year	Individual Access to NSP per Year	% IDUs accessing NSPs in a year
Central Asia and Eastern Europe				
Georgia	80,000	393,065	2,355	3%
Kazakhstan	122,850	1,211,664	37,310	30%
Kyrgyzstan	44,398	N/A	N/A	N/A
Tajikistan	20,000	2,251,897	8,419	42%
Russia	1,825,000	6,904,460	122,997	7%
Ukraine	229,000	10,000,000	95,000	41%
Southeast Asia				
Cambodia	2,025	17,631	34,412	N/A
China	2,350,000	1,173,764	38,000	2%
Indonesia	237,057	511,670	49,000	21%
Malaysia	195,000	1,903,174	5,572	3%
Vietnam	200,000	20,000,000	140,254	70%
<b>Total</b>	<b>5,305,330</b>	<b>44,367,325</b>	<b>533,319</b>	



# Take-Away Message

- In PEPFAR countries, only 10% of IDUs accessed NSP services
- In PEPFAR countries, IDUs who accessed NSP services received an average of only 83 needles per year, when they needed 200



# MAT Coverage for IDUs

	Estimated # of opioid injectors among IDUs (60% of total)	Estimated # of basic MAT coverage (20% of opioid injectors)	Individuals on Methadone Therapy
Central Asia and Eastern Europe			
Georgia	48,000	9,600	1,000
Kazakhstan	73,710	14,792	50
Kyrgyzstan	26,639	5,328	735
Tajikistan	12,000	2,400	0
Russia	1,095,000	219,000	0
Ukraine	137,400	27,480	4,634
Southeast Asia			
Cambodia	1,221	244	0
China	1,410,000	282,000	93,733
Indonesia	142,234	28,447	2,854
Malaysia	117,000	23,400	4,135-6,538
Vietnam	120,000	24,000	1,484
<b>Total</b>	<b>3,183,198</b>	<b>636,640</b>	<b>104,490</b>

# Take-Away Message

- **Only 3.3 per 100 IDUs are on MAT in PEPFAR countries**

# ART Coverage for IDUs

- Limited data are available about the number (%) of IDUs receiving ART
  - China: 14.7% of 52,000 total ART patients
    - HIV prevalence in IDUs is 38%
  - Ukraine: 17.5% of 10,629 total ART patients
    - HIV prevalence in IDUs is 60%
  - Tajikistan: 55% of 231 total ART patients
    - HIV prevalence in IDUs is 55%



# Take-Away Message

- **About 4 per 100 HIV+ IDUs are on ART in PEPFAR countries**



# Costs for Scaling Up

# Regional NSP Costs and Coverage

	Estimated # IDUs	20% coverage cost ( mean \$)	40% coverage cost ( mean \$)	60% coverage cost ( mean \$)
Eastern European and Central Asian Countries	2,321,248	\$3,249,747	\$6,499,494	\$9,749,242
South and Southeast Asian Countries	2,984,082	\$4,177,715	\$8,355,430	\$12,533,144
Total	5,305,330	\$7,427,462	\$14,854,924	\$22,282,386

# MAT Costs and Coverage

	Estimated # of opioid injectors	# of current on MAT	20% coverage cost ( mean \$)	40% coverage cost ( mean \$)
Eastern European and Central Asian Countries	1,392,749	4,932	\$194,357,564	\$392,218,450
South and South- east Asian countries	1,790,449	117,941	\$170.583.696	\$424.943.834
Total	3,183,198	122,873	\$364,941,260	\$817,162,284



# **Barriers to Implementing Services**

# Barriers to accessing MAT

	Vietnam	China	Indonesia	Malaysia	Russia	Ukraine	Georgia	Kenya
Legislation	X			X	X	X	X	
Poor availability	X			X		X	X	
Restrictive inclusion criteria	X			X		X	X	
Transportation Cost		X		X		X	X	
Lack of Confidentiality		X				X	X	
Mandatory drug user registration of pre-MAT	X	X		X		X	X	
Limited local capacity	X	X		X		X	X	
Limited Funding				X		X	X	
Limited gov't/local policy support	X			X	X	X	X	X
Stigma	X	X	X	X	X	X	X	X
Lack of knowledge by the decision maker			X	X	X	X	X	X
Adequate # of IDUs to get government support							X	
High cost of medication				X			X	
Overall cost of treatment program							X	

# Conclusions and Recommendations



# Conclusions: nature and scope of public health challenge

- Burden of HIV disease is high and growing in many regions and countries
- Access to services including needle and syringe programs (NSPs), medication assisted treatment (MAT) and antiretroviral therapy (ART) remains low
- Legal, policy, regulatory barriers have greatly limited the scope and quality of interventions
- Financial, technical, and human resources committed by PEPFAR have been limited

# Take Home Messages for OGAC

We need to make progress towards:

- Reaching 60% of IDUs with NSP with at least 200 syringes /person /year
- Increasing MAT coverage to 20% of IDUs
- Equity in providing ART to IDUs.

**Thank you for your attention!**