LinkTADs

联合国在中国的狂犬病防控工作简介

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- Background information
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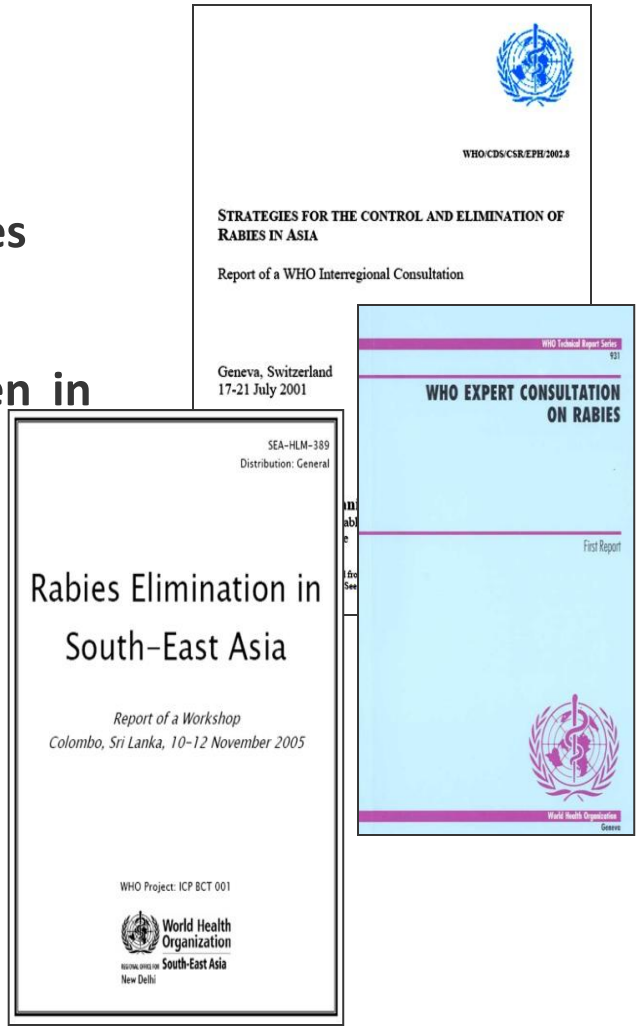
- Update on rabies control in China
  中国狂犬病防控情况
- Challenges, opportunities and next steps
  挑战、机遇和下步计划
- Conclusion
  结论

Rabies Elimination in Dogs is Feasible!
狂犬病根除可行

- **Still a neglected vaccine preventable disease**
  被忽略的靠疫苗预防的疾病
- **Dogs: main species responsible for fatal human cases**
  犬：是人间病例的主要源头
- **Developing countries: disease of the poor, children in remote areas**
  发展中国家：穷人的疾病，偏远地区的孩子



- Endemic in 150 countries; India and China reporting most of the cases

  150国家地方流行；印度和中国报道病例最多
- Mounting evidence rabies elimination is possible

  大量事实证明狂犬病根除是可行的
  - Japan – Taiwan (China) – Malaysia

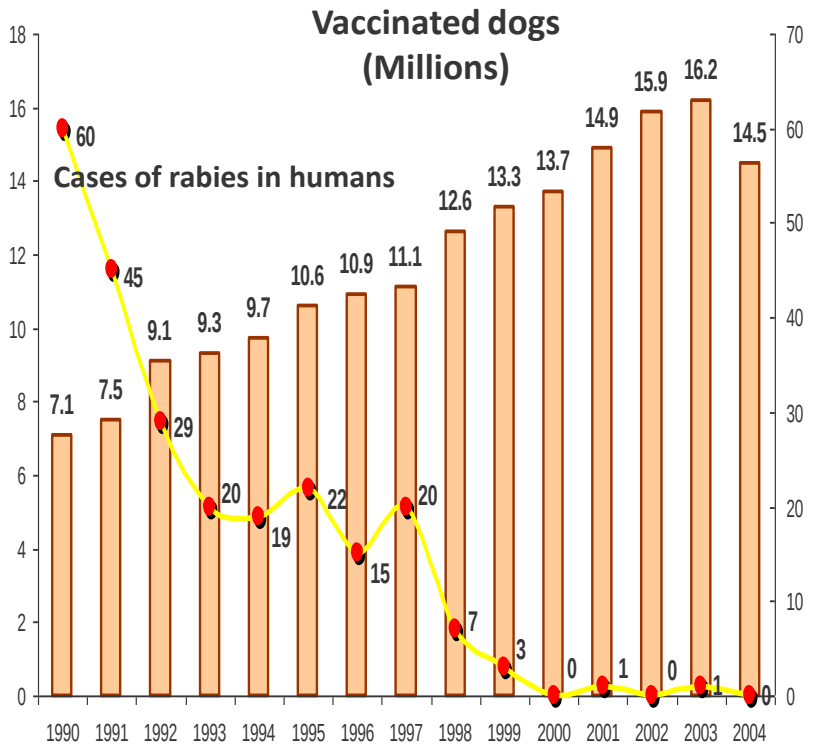
    日本-中国台湾-马来西亚
  - Large areas and cities in Central - South Americas

    南美洲的大部分区域和城市
  - Bangladesh, Sri Lanka committed

    孟加拉国，斯里兰卡承诺

Cases of rabies in humans and vaccinated dogs in Mexico

墨西哥狂犬病人间病例及免疫犬数量



UNTGH Activities re. Rabies
联合国健康专题组

- UNTGH: The United Nations Theme Group on Health
  联合国健康组

- Rabies Thematic Forum, Beijing, December 2010
  2010年12月在北京召开狂犬病主题论坛
- Second Rabies Thematic Forum in Mar 2011
  2011年3月召开第二次狂犬病主题论坛
  - Introduction to the Advisory and Technical Board on Rabies
    讨论成立狂犬病技术咨询委员会

◆Rabies Technical and Advisory Board
狂犬病技术咨询委员会

In 2011, the World Health Organization (WHO) and the Food and Agriculture Organization of the United Nations (FAO) in China formed a Rabies Technical Advisory Board (RTAB) composed of independent national and international experts that aims at identifying gaps, promoting and making recommendations, to the government of China, on best practices to eliminate rabies from the country.

2011年世界卫生组织和联合国粮农组织在中国成立狂犬病技术咨询委员会，由国内和国际专家组成，旨在于发现我国狂犬病防控的盲点，为政府提出建议，采取最佳措施达到根除狂犬病的目的。

- **First RTAB meeting on Apr 16, 2011**

  2011年4月16日第一次狂犬病技术咨询委员会会议

  - **agreement on objectives and rules**

    在目标和规则上达成协议

- **Presentation of RTAB at the national Rabies conference, May 16, 2012**

  2012年5月16日狂犬病技术咨询委员会在国际狂犬病论坛做报告

  - **Situation analysis: information gaps and needs for a strategic plan**

    现状分析：信息壁垒和政策规划

FAO ECTAD Activities
联合国粮农组织跨界动物疫病应急中心

Activities supported by FAO

FAO支持的活动

- **Case study training materials on rabies with experts from the Netherlands, Mar 2011 for FETPV**

  2011年3月，与荷兰专家开发病例研究培训材料用于兽医现场流行病学培训

- **Surveillance project with FETPV**

  兽医现场流行病学培训做的监测项目

- **Rabies Awareness Campaign, Guangxi, September 2011**

  2011年9月，广西狂犬病宣传活动

- **TTS (Training through Services) Activities on Rabies conducted by FETPV, 2011-2012**

  2011至2012年，兽医现场流行病学培训项目组织的服务型培训活动

Rabies Awareness Campaign, Guangxi, Septermber2011
2011年9月，广西狂犬病宣传活动

In line with the One Health spirit and to respond to the World Rabies Day, a two-day Rabies Awareness Campaign was launched in Guangxi, with the support of China Animal Health and Epidemiology Center (CAHEC) and FAOECTAD China office, together with local partners. More than 120 dogs were vaccinated and 150 copies of education materials were delivered to local people.

贯彻同一健康的理念，响应世界狂犬病日，在广西进行的为期2天的狂犬病宣传活动得到国家流行病学中心和联合国粮农组织跨界动物疫病应急中心的支持。120多只犬被免疫，150多份宣传教育材料发放到当地民众手里。

Development of case study training material on Rabies with experts from Netherlands, March 2011

2011年3月，与荷兰专家一起开发狂犬病病例研究培训材料

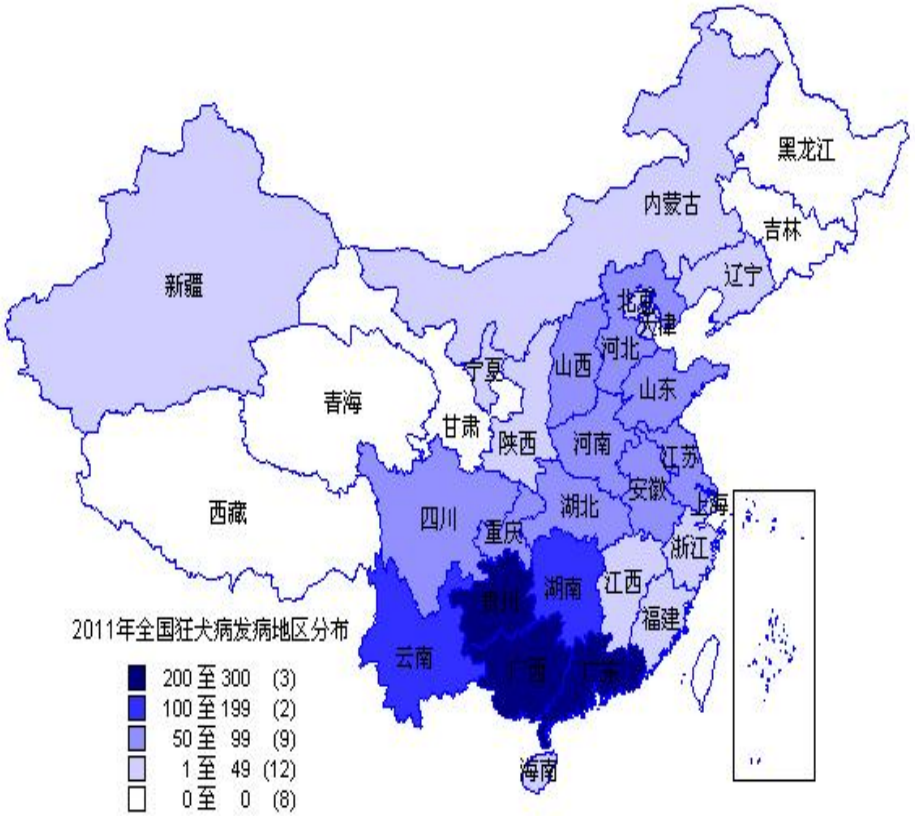
With the assistance of experts from Netherlands, a case study related to rabies for China FETPV training was developed and had been put into use in the 3rd module of the training. This is the first case study based on Rabies situation which was used for epidemiology training.

在荷兰专家的帮助下，开发的狂犬病病例研究培训材料已投入兽医现场流行病学三期培训使用。这是第一份基于狂犬病的教学案例，用于流行病学培训教学。

Situation in China
中国狂犬病情况

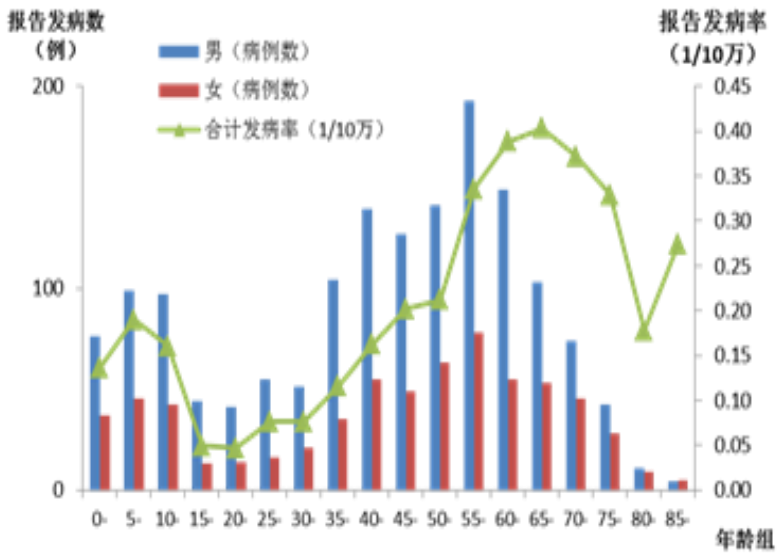
- Top three deadly infectious diseases in many provinces
  是很多省份死亡排名前三的疾病
- Re-emergence for past 10 years, dramatic progress for the past 5 years
  近10年狂犬病病例再现，近5年狂犬病防控成效显著
  - Incidence has decreased since 2007 peak (>3300 reported cases)
    从2007达到峰值后（报道3300多例）病例数有所下降
  - PEP in endemic areas
    狂犬病流行区域暴露后预防处理
  - Notifiable diseases surveillance in human but animal surveillance needs improving
    人医有比较明确的监测体系，但动物监测工作需要进一步完善
  - National production of vaccines and immunoglobulin
    疫苗及免疫球蛋白制品
  - Elimination can be a potential option but not officially announced
    根除是有可能的，但并没有官方声明

Human rabies cases in China, 2011
2011年中国人间狂犬病病例分布情况



地区名称	今年发病数	发病率增减%
全 国	1918	-6.72
广 西	286	-8.42
贵州省	210	-7.81
广东省	201	-38.71
湖南省	160	2.01
云南省	118	-10.43
河南省	98	12.28
河北省	94	-24.57
山东省	90	20.23
山西省	88	101.14
江苏省	87	13.90
湖北省	87	3.54
重庆市	85	-12.24
四川省	75	-9.06
安徽省	50	9.52
海南省	45	-35.95
江西省	44	-10.76
陕西省	41	97.13
浙江省	19	-27.74
内蒙古	12	95.97
天津市	8	89.57
上海市	7	94.87
北京市	5	-44.08
新疆	2	-
宁 夏	2	-
辽宁省	2	-
福建省	2	-78.23
西 藏	0	-
青海省	0	-
吉林省	0	-
黑龙江省	0	-
甘肃省	0	-

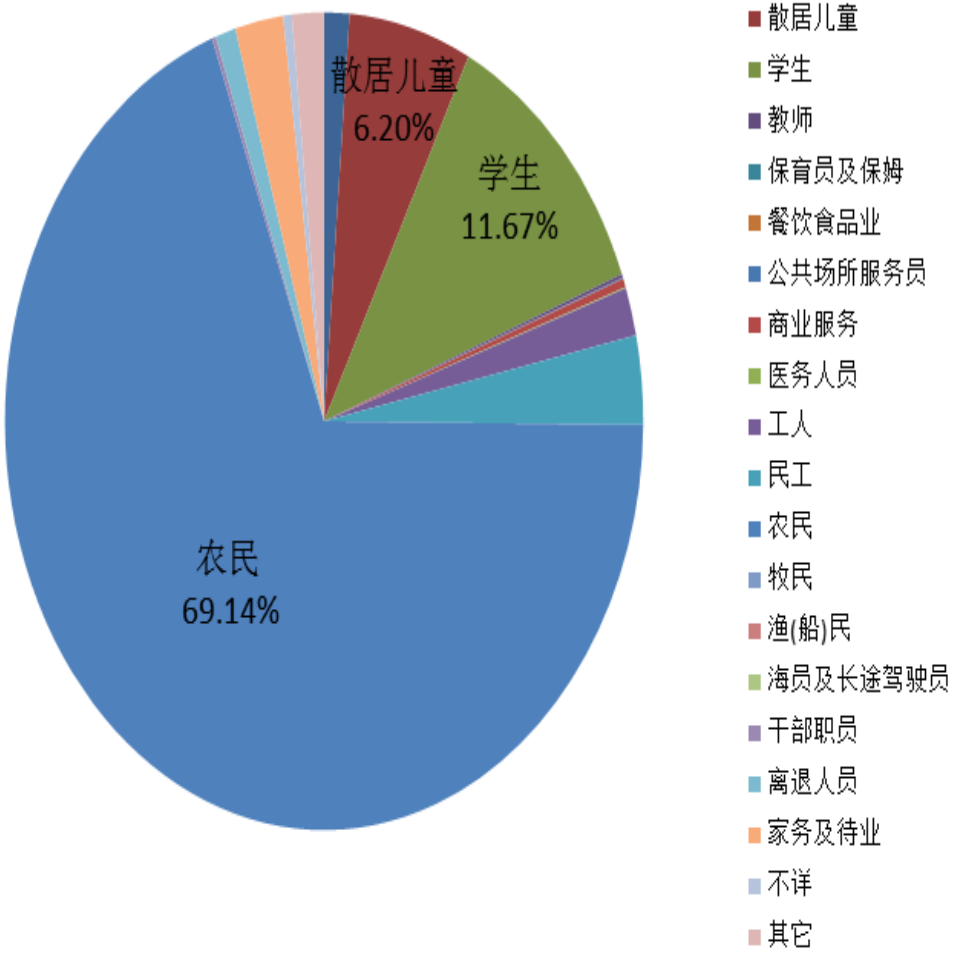
Most Cases from rural areas in the South
病例大多集中在南方农村地区



- M:F 2:1
  男女比例2：1
- Cases in children and older people
  多发生在儿童和老年人
  - 5~15
  - 30~60

- >90% of the cases to remote areas of southern poor farmers and children
  90%以上的病例集中在南方偏远地区的贫苦农民和儿童

Occupational distribution， 2010
2010年狂犬病人间病例的职业分布情况



Canine rabies control is the key problem of rabies control in China
犬狂犬病的控制是我国狂犬病人间病例控制的关键

- **Dog is still the most important rabid animal in China**

  在中国，犬只仍然是狂犬病毒最主要的宿主

  - **>90% of rabies cases were caused by dog bitten**

    90%以上的人间病例是由于犬伤人导致的

- **Burden of dog bite is increasing**

  犬伤人后处理成本不断上升

  - **12~15 million doses vaccine, 3.5~5.0 billion CNY per year**

    每年**1200**至**1500**万份疫苗消耗，**35**至**50**亿人民币开销

  - **Estimated PEP burden, 24.5 billion CNY (17.0 in rural; 7.5 in urban)**

    估计狂犬病暴露后的预防处理成本高达**245**亿元（农村**170**亿；城市**75**亿）

Control in Animals
动物狂犬病控制

Annual average dog vaccination coverage varying from 18% to 33% for a dog to human ratios of 12.4 :100 – 21.8:100 between 2008 and 2010. However, large disparities exist for these estimates between rural areas and cities or western and coastal provinces. Authors report for the past 5 years vaccination coverage as high as 93% in Shanghai or 77% in some cities of Shandong province as opposed to 4% - 10% in endemic rural of Guizhou province for instance.

从2008到2010，平均每年犬免疫的覆盖范围为18%至33%，犬和人的比例为12.4:100到21.8:100。但是，城市和农村，沿海和西部地区差异巨大。举例说，有文献报道，近5年上海市的犬免疫的覆盖率高达93%，山东省的一些城市是77%，相反的，贵州省狂犬病流行的农村地区只有4%至10%。

Surveillance in human and dogs
监测体系

- **Human: Surveillance is systematic and nationwide using an innovative hospital and web-based reporting system.**
  人：通过医院和网报系统形成系统的覆盖全国的监测体系

- **Dogs: MoA adopted a national protocol for national rabies surveillance in dogs in 2009, however, diagnosis and surveillance for animal rabies is not functioning optimally across the country.**
  犬：2009年农业部采用国际准则形成了国家级狂犬病监测体系，但是需要进一步完善。

- **Joint investigations between public health, veterinary and public security services are rarely seen.**
  很少见卫生部门、兽医部门和公安部门的联合调查。

Challenges and opportunities
挑战和契机

- **Stray dog and rural domestic dog management--- vaccination campaigns**
  流浪犬和农村犬管理 --- 免疫

- **Dog population control --- an effective strategy for dog population management adapted to local resources and specificities, complicit between animal welfare and stray dog killing**
  犬群数量控制 --- 有效的政策性措施，控制犬群数量，与当地资源相适应, 动物福利和流浪犬扑杀的矛盾

- **Under-reported or under-recognized --- multisectoral effort**
  瞒报或是未发现 --- 多部门努力

Next step
下步计划

- **Beijing 北京**
  - **Joint risk analysis 联合风险分析**
- **Chongqing 重庆**
  - **Joint outbreak investigation 联合爆发调查**
  - **Stray dog investigation 流浪犬研究**
  - **Joint risk analysis 联合风险评估**
  - **Target public awareness 定向公众教育？**

Conclusions
结论

- **Rabies control and elimination is the best candidate for successfully implementing the 'One health' concept.**
  狂犬病的控制和根除能最好的贯彻同一健康的主题

- **Never before, there is an international momentum**
  从未有过的国际领域的契机

- **3 elimination programs supported by Gates Foundation**
  是盖茨基金支持的3个根除项目之一

- **However, no global operational manual for rabies control and elimination**
  但是， 尚未有狂犬病控制和根除的全球性操作手册

- China 中国:
  - China CDC supportive of elimination
    疾控中心支持
  - However, MoH still needs evidence of an achievable goal
    但是，卫生部有待证实这是可以实现的目标
  - Tremendous international impact if/when China achieves elimination
    如果（当）中国根除了狂犬病，将产生巨大的国际影响

- RATB/UNTGH should assist
  狂犬病技术咨询委员会/联合国健康专题组协助

- Potential opportunity for fund raising for a regional approach
  潜在资金支持用于区域性狂犬病控制

Partners 合作伙伴

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