# Importance of Data

Global Alliance for Rabies Control

GARC-WAP workshop

Franschhoek, South Africa

Disease Prioritization

Rabies circle of neglect:
Fuelled by poor laboratory diagnosis and surveillance

Poor reporting, awareness

Poor diagnosis, surveillance

Poor submission rate, low priority

More rabies
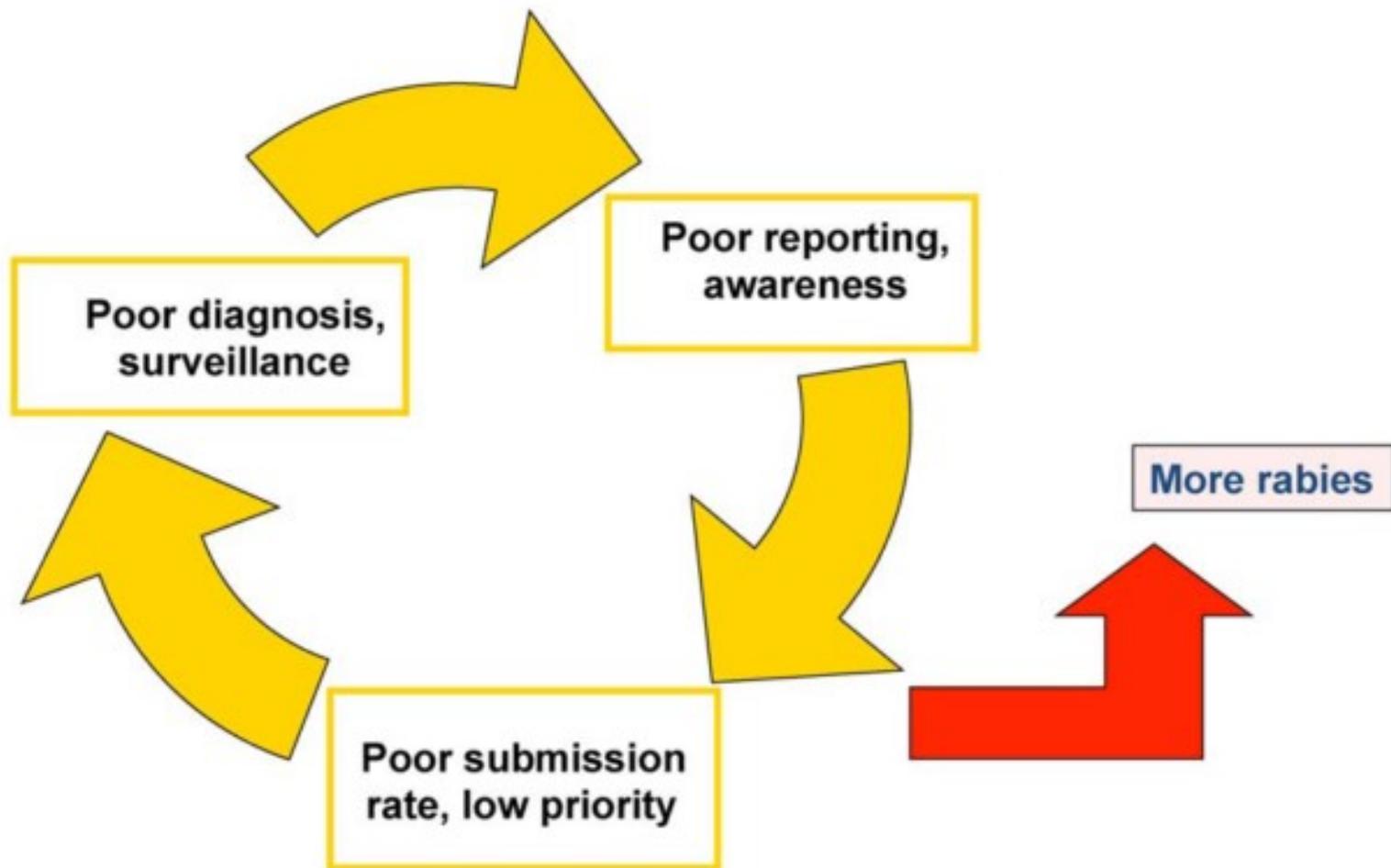
Disrupting the cycle

Rabies circle of neglect:
Fuelled by poor laboratory diagnosis and surveillance

Data

Poor reporting, awareness

More rabies

Poor submission rate, low priority

Poor diagnosis, surveillance
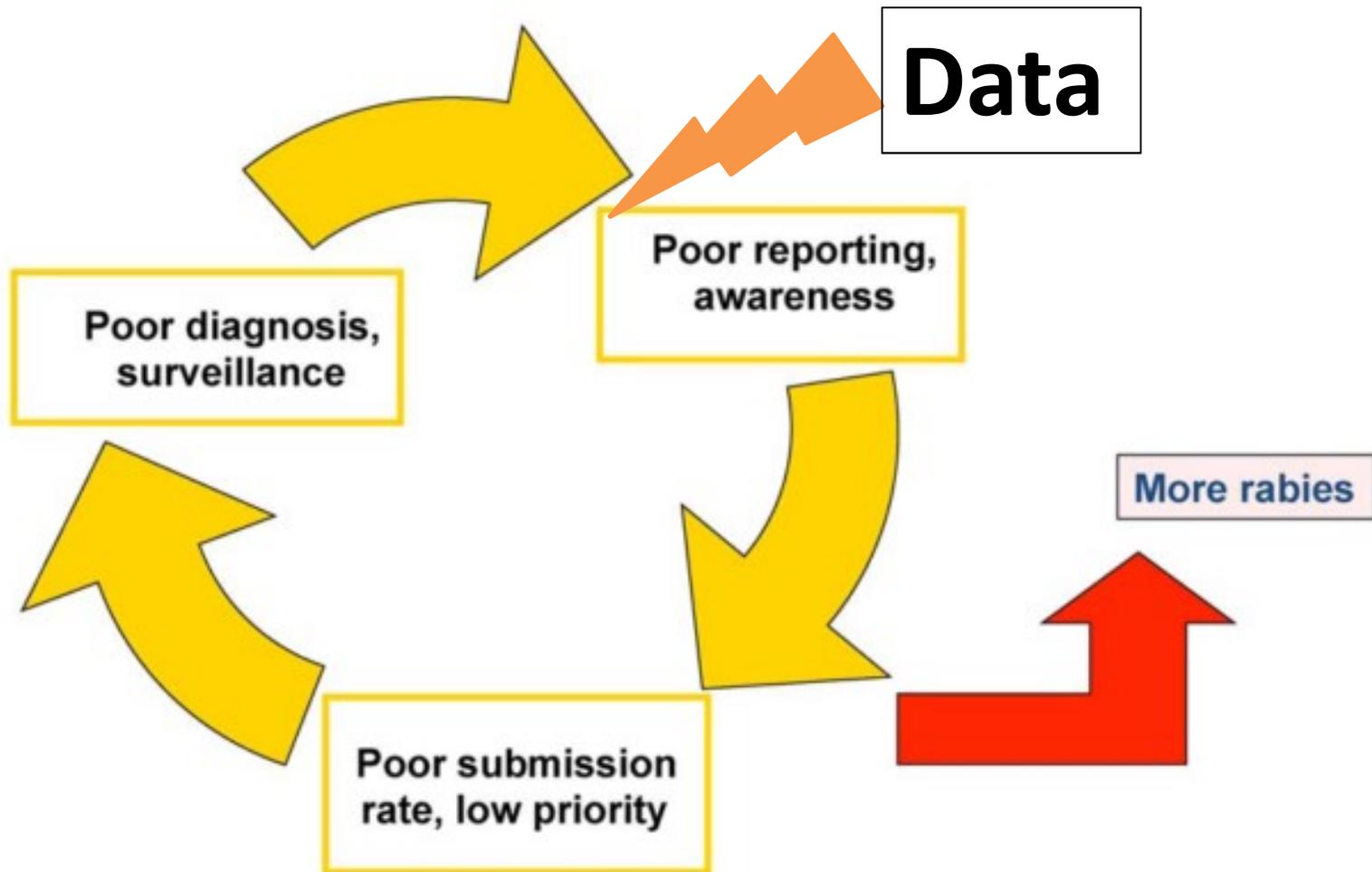
How data breaks the cycle

Improved Data

Increased Prioritisation

Improved surveillance

BUT...
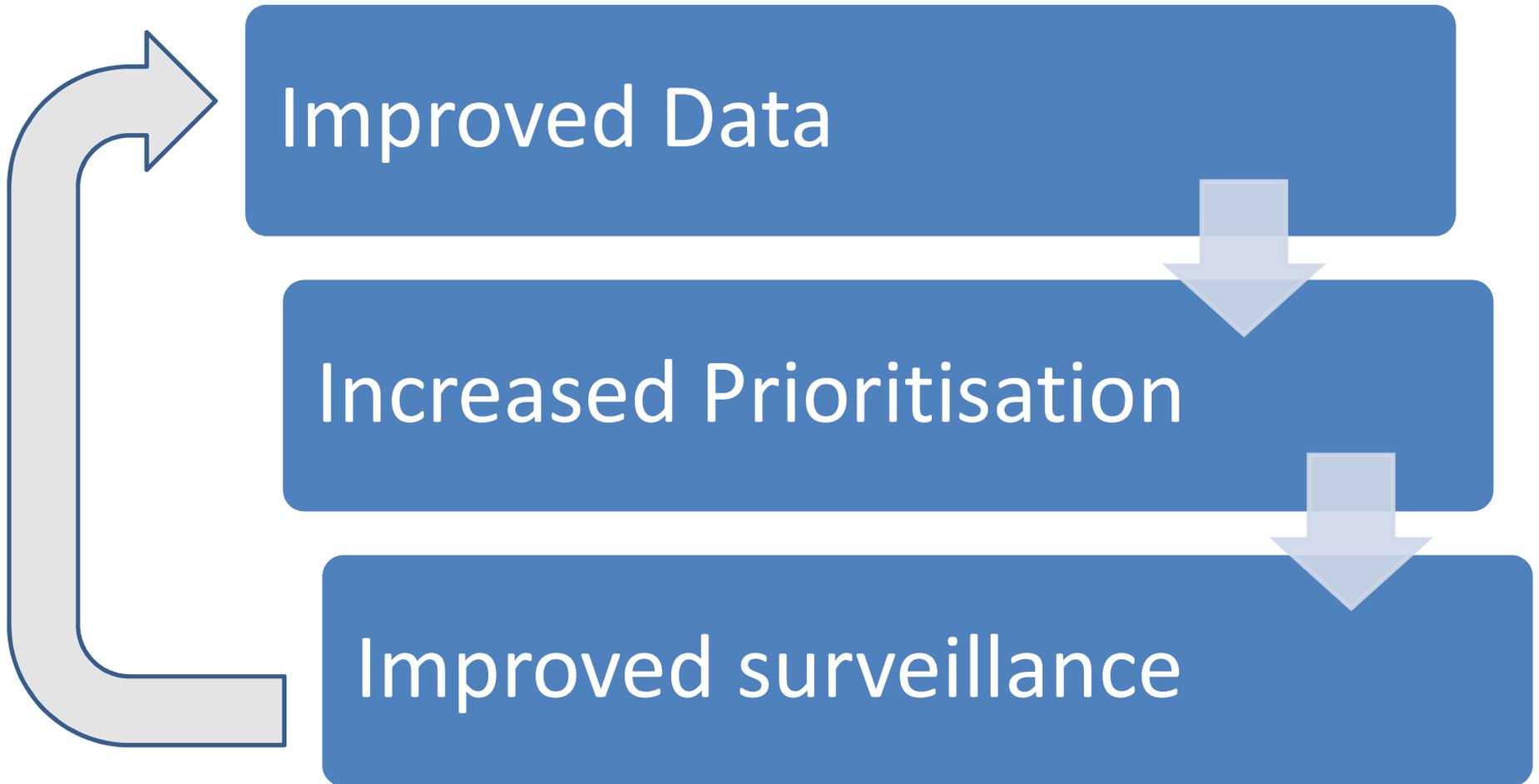
```
        Poor Data
        /        \
Poor decisions    Misrepresented
    |             burden
Little impact on      |
   disease       Return to cycle of
                    neglect
```
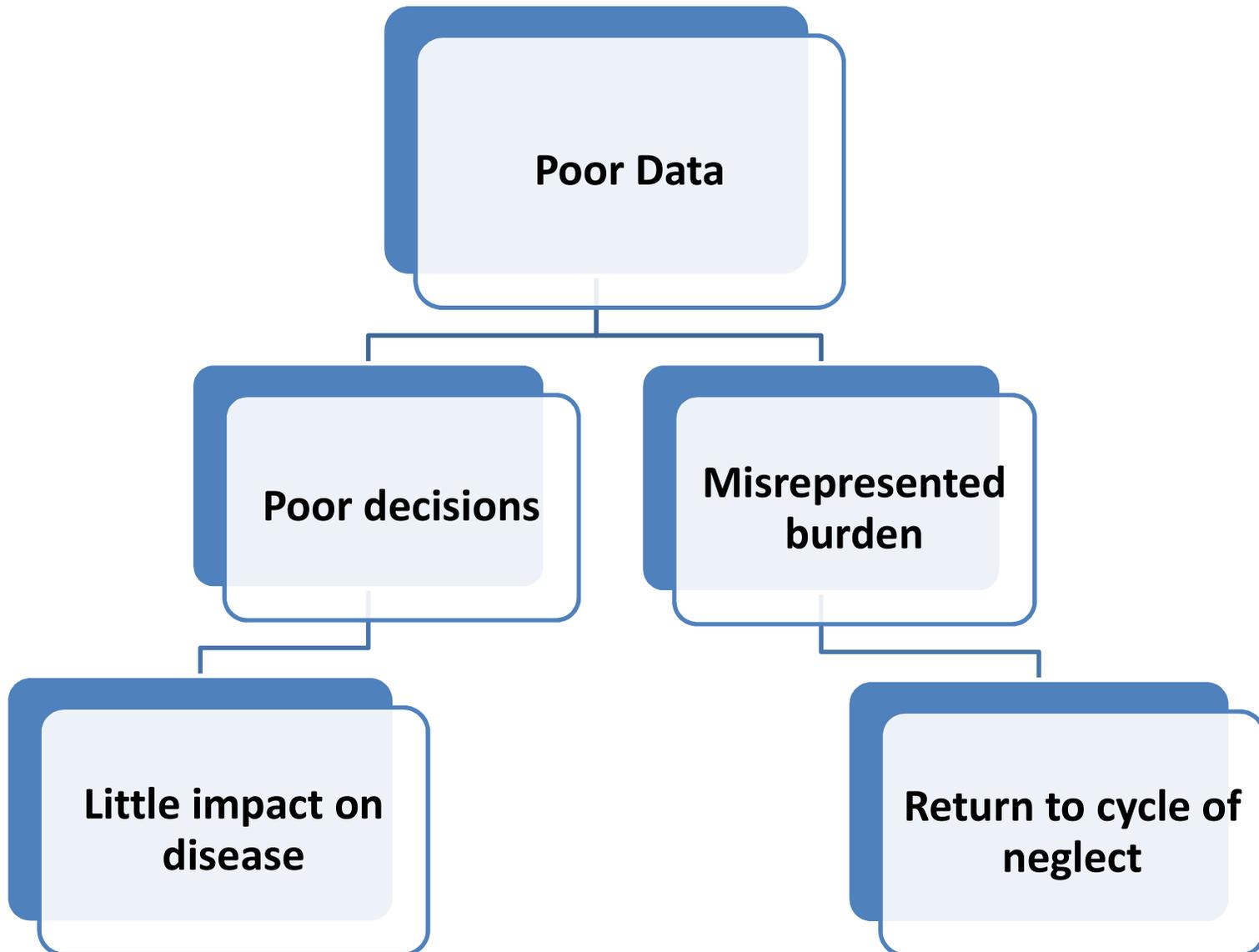
Good data vs Poor data

Good data

✓ Accurate
✓ Timely
✓ Can be analysed further
✓ Meaningful

Poor data

X   Partially complete
X   Late
X   Irrelevant to specific aim
X   Never analysed/processed

Obtaining data... is not always easy!

What can be done with good data?

- Determine the true burden of the disease

- Influence decisions to improve control efforts

- A platform for advocacy
  - Prioritisation
  - Funding
  - Support
  - Recognition

- Evaluate progress towards elimination

Making a statement

Africa: Annual Cost of Rabies

$1,282,462,412 USD

$14,520,789   Dog vaccination
$1,305,247   Dog Population Management
$122,267   Surveillance

$773,352,665   Productivity Losses
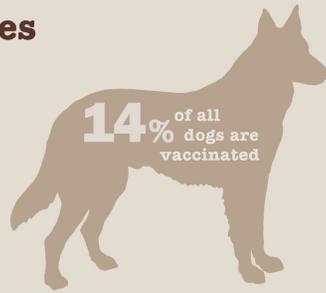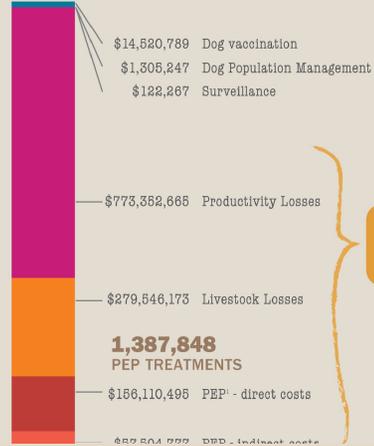
AVOIDABLE LOSSES
$ 1,266,514,109 = **$1.23** per capita

$279,546,173   Livestock Losses

1,387,848
PEP TREATMENTS

$156,110,495   PEP¹ - direct costs

$57,504,777   PEP - indirect costs

14% of all dogs are vaccinated

HUMAN POPULATION: **1,028,700,000**

847,326	1,345,643	21,502
EXPOSURES	DALYS² LOST	DEATHS

Current Spending on Rabies Vaccination

AFRICA

1.4¢ **DOG VACCINATION** cost per capita
15.2¢ **PEP¹** cost per capita

6% DOGS VACCINATED

20.9 RABIES DEATHS per million population

ASIA

1.0¢ **DOG VACCINATION** cost per capita
34.2¢ **PEP** cost per capita

18% DOGS VACCINATED

9.33 RABIES DEATHS per million population

LATIN AMERICA

11.4¢ **DOG VACCINATION** cost per capita
24.1¢ **PEP** cost per capita

57% DOGS VACCINATED

.34 RABIES DEATHS per million population

1 PEP - Post Exposure Prophylaxis is a course of vaccinations that protects a person against rabies after exposure to the virus. Costs are in US currency.
Source: Estimating the Global Burden of Endemic Canine Rabies, K. Hampson et. al. PLoS Negl Trop Dis. 2015 May;9(5)

GLOBAL ALLIANCE FOR RABIES CONTROL PARTNERS FOR RABIES PREVENTION   rabiesalliance.org

WHY WE NEED TO END RABIES NOW

Canine rabies is one of the world's oldest diseases, eliminated in countries like the US and the UK, but still a daily threat to millions around the world.

Every **09** minutes, a person dies from **RABIES.**

100% of human cases are **preventable.**

Domestic dogs cause over **99%** of human rabies deaths.

Vaccinating **70%** of dogs in at-risk areas can eliminate canine rabies.

Nearly **85%** of the world is at risk of contracting canine rabies.

95% of human rabies deaths occur in Africa and Asia.
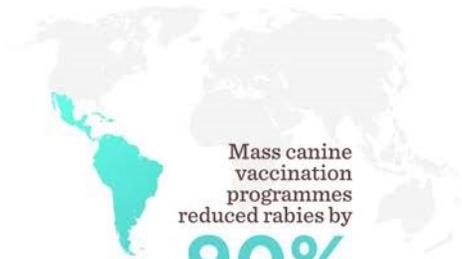
Mass canine vaccination programmes reduced rabies by **90%** in Latin America.

Canine rabies kills more than **59,000** people every year.

2.9 million lives are saved annually due to preventative measures.