This map shows where women are dying of cervical cancer. The darker the area, the greater the numbers of deaths.

50 years ago, this map would have been dark everywhere. But in high-resource settings we have successfully used Pap smear screening to identify precancer early and treat it when it is most treatable.

Unfortunately Pap is complex and expensive and we have not successfully sustained it in middle- and low-resource settings.

But in the past decade or so we have discovered and validated alternatives to Pap.
One of the most exciting alternatives is visual inspection with acetic acid, or VIA.

VIA is as sensitive, or more sensitive, than Pap, but it is much less expensive. Trained doctors or nurses can perform VIA—no specialists or technicians are needed and the equipment is simple.

15 years ago this map, showing where VIA is being used, would have been blank.

10 years ago, a few countries would have been light blue, representing early programs to assess VIA in real-life settings.

Now the evidence-base is clear. VIA is effective and it is cost-effective. It is becoming a norm in many countries.

But there still is a lot of work to do—too much of this map is grey. And it is estimated that only 5-10% of women in the developing world ever are screened for precancer.
HPV DNA testing is much more sensitive than VIA or Pap, but use is limited because the current equipment is expensive and requires laboratory facilities.

Fortunately, a new, much less expensive and more “field-friendly” version of the test is being assessed in Africa, Asia and Latin America and may become available on the market within the next few years.

Preliminary results suggest that the new test may allow women to collect HPV DNA samples themselves, in the privacy of their own homes or in a washroom at the clinic. If the data continue to support this approach, it could radically change our ability to screen many women at the same time, with reduced burden on health staff, who then could focus on offering treatment as indicated.
HPV vaccine has been adopted rapidly since it first became available in 2006, but only in countries that could afford the high cost of vaccine.

The vaccine is very effective when given to girls before they begin their sexual lives, and it has a very good safety profile.

As you can see from the map, the vaccine is being adopted rapidly by countries that can afford it. But these are not the countries with highest mortality. It is crucial to make HPV vaccine affordable for those countries as soon as possible.
This graph represents the lowest documented, public-sector prices for HPV vaccine in early 2011. These prices are per dose; three doses are needed for full protection.

The 2008 price of $100 is what the US government paid at that time.

But PAHO, through it’s EPI Revolving Fund, has used bulk purchasing power to negotiate the price down radically. In 2009 they secured a price of $32 per dose, then $19 a dose in 2010 and $17 a dose in early 2011.

In fact this graph already is out of date—PAHO now has the price down to $14 a dose.

This is still too high for many countries, but price reduction will continue. Once the GAVI Alliance takes up HPV vaccine, their purchasing strength likely will reduce the price to single digits (less than $10 per dose) for GAVI, who will then may make the vaccine available to eligible countries for as little as 20 to 30 US cents per dose.
This table celebrates the remarkable achievements the world has made in reducing mortality due to pregnancy-related complications (sometimes called “maternal mortality”).

But these same mothers also are vulnerable to cervical cancer 10 or 20 years after their first pregnancy, and while they still support their families and communities.

To improve mother’s health during delivery and as their families grow, we need to increase focus on cervical cancer.

We have the tools (VIA and HPV DNA testing and HPV vaccination) and we have proven strategies for using them. Now is the time to make a difference!

<table>
<thead>
<tr>
<th></th>
<th>Pregnancy-related Complications (Maternal Mortality)</th>
<th>Cervical Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Deaths</td>
<td>358,000 women die annually</td>
<td>270,000 women die annually</td>
</tr>
<tr>
<td>Mortality Trends</td>
<td>↓34% decrease in mortality 1990-2008</td>
<td>↑45% increase in mortality 1990-2008</td>
</tr>
<tr>
<td>Prioritization in Millennium Development Goal (MDG)</td>
<td>YES (MDG 5—Improving Maternal Health from Pregnancy Related Complications)</td>
<td>NO</td>
</tr>
<tr>
<td>Current Annual Investment in Developing World</td>
<td>USD 12 billion</td>
<td>??? exact figure unknown</td>
</tr>
</tbody>
</table>
The Report Card from which these maps came can be downloaded from Cervical Cancer Action.
The RHO Cervical Cancer library is an excellent source of scientific information from the top agencies worldwide.