

Spectrum Update List

The latest version of Spectrum is Version 2.37

- 2.37 6/1/05
- Updated strings for new AIM and Demproj changes.
 - Added new section in PMTCT.
 - Fixed bugs in the EPP routine.
 - Numerous bug fixes in the new AIM section.
- 2.36 4/12/05
- Found and fixed bug that was causing incorrect outputs for New Infections, New AIDS Cases, and Number Infected.
- 2.35 4/5/05
- Fixed bug found in EasyProj routine.
- 2.34 4/1/05
- Added new EasyProj Data files that will be read into Demproj. These include ASFR, Sex Ratio, and Migration.
- 2.33 3/24/05
- Fixed bug for the calculation of the effect of the PMTCT program in AIM.
 - Fixed bug for new EasyProj Sex Ratio inputs.
 - Fixed Final Year bug that occurs because of the new Ranges and Regions summary tables.
 - Fixed string error in AIM. New infections by age had "Percent" in the title.
- 2.32 3/21/05
- Fixed bug with "Number on ART" output in AIM. This was not being calculated.
- 2.31 3/19/05
- Fixed bug in Prevalence and Incidence outputs in AIM. It was being displayed as a whole number instead of having two decimal places after it.
- 2.30 3/9/05
- Added ability to read new SPT files from EPP as well as the older version.
 - Prevalence can now be read in from formatted excel files in AIM.
 - Added new DHS inputs in AIM.
 - Reworked the "HIV Age Distribution" tab in AIM. Added buttons "Apply Generalized Epidemic Pattern" and "Apply Concentrated Pattern". Updated the patterns.
 - Reworked the MTCT tab in AIM. Added three new options the user can choose from. "Medium Duration of Breast Feeding in Population", "Treatment program", and "Infant feeding options". Two new inputs were added, "Base transmission rate (no program)" and "Transmission rate with program". User can specify if they want to enter "Pregnant women receiving PMTCT" as percent or as a number.
 - Added new "Child Treatment" tab in AIM. Five new inputs were added here. They include: "Percent of children born to HIV+ mothers receiving cotrimoxazole",

"Percent of children with moderate-to-severe HIV disease receiving ART", "Percent of children on cotrimoxazole surviving to the next year", "Percent of children with moderate-to-severe HIV disease on ART surviving to the next year", and "Percent of children with moderate-to-severe HIV disease on ART and cotrimoxazole surviving to the next year. The user can also decide if "Early diagnosis of HIV-infection is available".

- Reworked the AIM display. It is now split into the submenus "Total populations", "Adults", "Children", "Regional table", "Ranges table", "Orphans", and "Impacts".
- Added new summary table outputs "Regional" and "Ranges"
- Added four new outputs for children. They are "Need for cotrimoxazole", "On cotrimoxazole", "Need for ART", and "On ART".
- Updated the EasyProj data.
- Disable the "HIV/AIDS parameters" tab in AIM.
- Added version number to the splash screen.
- Removed unused AIM impacts inputs and outputs. "TB incidence without HIV", "Percent pop with latent TB", and "TB incidence with HIV" are only needed.
- Changed the name of the install file from "Spectrum.exe" to "SpecInstall.exe". This was done to avoid user confusion from the actual install file name to the run file name.

2.29 12/3/04

- Added new feature in AIM. For Adult HIV Prevalence, the user can now click on a check box to be able to display 4 decimal places instead of 2. Adult HIV Prevalence is now being written to the output file with 4 decimal places.

2.28 8/20/04

- Made changes to PAC display menu. Removed "Lives Saved" output.
- Made string changes in the CR model. Changed Population Group names for "Commercial Sex Workers" to "Sex Workers", "Married or In-Union Couples" to "Married or In-Union Couples (for HIV)", and "Family Planning Users" to "Family Planning Users (for FP)".
- Added a warning popup dialog that comes up when the user is using the PAC model. It basically reminds them to have the abortion option "Calculate from unwanted pregnancies" enabled.

2.27 6/10/04

- Spectrum can now display the Chinese language.
- Fixed bug in EasyProj. When certain countries were selected an error message would display.
- Changed the way Number newly needing ARV therapy is calculated. It now uses Number on ARV Therapy.
- Fixed bug in Life Expectancy output. A Floating Point Error would occur when the user would display Life Expectancy without a re-calc.
- Added Total Number Needing ARV output.
- Added Adult population 15-49 to the Adult 15-49 summary sheet.
- Added child population 0-14 to the Child 0-14 summary sheet.
- Fixed bug in Sex Birth Ratio calculation.
- Updated the way All AIDS orphans are being calculated. It now takes in account if one parent dies from AIDS it is more likely that the other parent will also die of AIDS than if the parent dies from some other cause.

- Fixed bug in “Total Number Needing ARV” calculation.
- Fixed bug in Sex Ratio. The formula to calculate male and female infections to achieve the desired sex ratio didn’t work well over the long term.
- Fix bug in the Life Tables that would occur when Easy Proj was selected with the Japanese country.
- Fixed bug in All AIDS Orphans calculation.
- Made changes to NewGen calculations.
- Added New Orphans section in AIM.
- Reworked the New Orphans section. New outputs are “Total New Orphans” and “Orphans and Vulnerable Children”.
- Fixed bug in PAC model, it now handles division by zero error.
- Fixed bug with the new Custom Model Life table. Program will set the Life table back to default if the path is invalid.
- PJN file now writes the version number out.
- Added new Condom Resource Model.

2.26 2/11/04

- Modified the AIM output file to now write out the new Orphans change from 0 to 14. It now goes from 0 to 17.
- Added to new indicators in the AIM Adult 15-49 Summary output table. Indicators added are: Number newly needing ARV therapy(both sexes), Number newly needing ARV therapy(male), Number newly needing ARV therapy(female), and Number on ARV therapy(both sexes).

2.25 2/09/04

- Fixed bug in AIM. After the projection was re calculated it produced no children less than 14 with HIV.

2.24 2/02/04

- Fixed bug in Pyramid Charts. The max year constant was not changed from 50 to 100 years. If user had projection over 50 years and tried to display a Pyramid Chart they would get a Range Check Error.
- Fixed bug in AIDS death by Age Pyramid Chart. Data wasn’t being correctly outputted to the Pyramid Chart.
- Fixed bug in Number On ARV Therapy calculation.
- Changed default values for HIV Sex Ratio.
- New default pattern for sex ratio of female to male prevalence in generalized epidemics, peaking at 1.3.
- New default value for the reduction in TFR among HIV+ women 20-49 of 0.7, to balance the sex ratio change.
- Life table designations in EasyProj are updated according to Ian's report of the meeting at UNPOP.
- In EasyProj, non-AIDS life expectancy at birth has been re-estimated for those countries with changed life table designations in order to maintain the same child mortality.
- Fixed a bug so that the Fast button for the child pattern for progression to AIDS death now gives the new default pattern.

- In DemProj the sex ratio at birth is now a vector instead of a scalar - you can make it change over time.
- You can now have your own custom life table file. In the model life table editor you can select "Custom" and designate a file name. The only thing to remember is that the life table file must be in the Spectrum\DP directory.
- Added a feature to DemProj to allow you to enter the base year population by single age.

2.23 1/9/04

- Added 4 new HIV indicators under AIM Epidemiology.
- Fixed Orphan Calculation problem, difference in years before AIDS epidemic.
- Added default values for the AIDS orphans inputs. 71 for both.
- Added new default values for child survival
- Added direct calculations of children born HIV+
- Added new indicator called Number on ARV Therapy under AIM Epidemiology.
- Added new summary of inputs table under AIM Epidemiology
- Copy All feature now displays the Indicator name.
- Added break lines in the display dropdown menu list under AIM Epidemiology
- Updated the life table to match what the UN Pop Division uses.
- Fixed bug in EasyProj that occurred when starting a projection in 1950
- Orphans now show ages 0 to 17 instead of 0 to 14.
- Fixed bugs in the PAC model calculations

2.22 8/7/03

- Added new model in FamPlan called Post-Abortion care.
- Fixed bug in FamPlan. The Duplicate and Interpolate buttons were not working in the Goals section.
- In FamPlan, fixed the calculation of acceptors of IUD and implants to exclude the separate calculation of discontinuation of new acceptors in the year of acceptance.

2.21 7/16/03

- Made change in FamPlan so that there can be no negative Acceptors output.
- Fixed Summary of Inputs bug in FamPlan. Summary Of Inputs should not show Female and Male Ster. Average age when Age Group Option is set to Five year Age Groups.
- Made a calculation change in FamPlan. The calculation was using a discontinuation rate based on the average age to calculate sterilization acceptors. Changed the calculation to remove the discontinuation from the calculation of acceptors for male and female sterilization.
- Fixed bug in FamPlan. When multiple Projections are loaded, the data is lost for Method Mix.
- Added Normalize button on the International Migration tab in Demproj. This button can only be used for Male and Female Age Distribution.

- Resized editors in Demproj and AIM so that more years are displayed without the user having to scroll.
- Now Arabic and Russian strings show up within cells. This is used in certain summary tables.
- Fixed bug in Demproj, on the ASFR tab if user selected “Enter from Keyboard” and tried to display a chart the “Custom” column would not show up.
- Updated Arabic strings.
- Updated Russian strings.
- Fixed Arabic and Russian string bugs.

2.20 5/6/03

- Made a fix in the Family Planning module. The Normalize button was not showing up in the Method Mix and Source Mix tabs.
- Fixed the Disaggregated check boxes in Family Planning Display.
- Added Select Fonts dropdown list in Environment dialog. It is now possible for the user to choose from many different fonts.
- Updated Portuguese strings in AIM and Demproj
- Updated Arabic strings.

2.19 4/25/03

- Updated strings for Russian and Arabic in AIM and Demproj.

2.18 4/18/03

- Made a change in the NewGen module. In the Abortion Rate editor sheet, set the input for two decimal places instead of one.
- Resolved the problem of having the user manually adjust the window size when using large fonts.

2.17 4/17/03

- Updated the data in the Easy Proj section of Spectrum.
- Changed the size of the Easy Proj screen to show counties with long names.
- Made a change in the Demproj editor. In the Demographic Data button, first year population tab. For very large first year population the numbers would not fit in the columns. Also set it up so that if the scalar is set to Units then no decimal place is shown.

2.16 4/8/03

- Fixed bug in EasyProj. When user would try to open an EasyProj file they would get a Range Check error.
- All EasyProj countries were not being read in correctly. Namely China Hong Kong SAR, China Macao SAR and China.

2.15 4/3/03

- All Orphans outputs were not being written to the AIM output file. Thus whenever a user came into the display and didn't force a recalculation data wouldn't show up.

2.14 3/31/03

- Fixed scaling problem in the Orphans Section.
- Made a change in NewGen. Changed calculations for Pregnancies, Births, and Abortions.

2.13 3/24/03

- Changed output files so that NAN and INF are not being outputted.

2.12 3/13/03

- Fixed bug in Orphans section, Maternal AIDS Mortality time loop error.

2.11 3/13/03

- Added Portuguese strings for new AIM Orphans section
- Added Portuguese strings for PMTCT
- Changed Summary by Age output in AIM section so that it now goes from 0 to 14 instead of 0 to 15.

2.1 3/3/03

- Fixed scaling problem in the new AIM Orphans summary section.

2.0 2/28/03

- The new version of Spectrum will not run under Windows 3.1. It will work under Windows 95, 98, ME, 2000, and XP. Anyone who is still using Windows 3.1 should continue to use the last release, version 1.63.
- Long file names, longer than 8, characters are now fully supported.
- There is a new chart type that displays a chart with a table of values at the bottom.
- Projections can now extend up to 100 years.
- The population projection now saves all the single age information. For most purposes this will not make any difference, but in cases where you are looking at special age groups, such as primary school age students, this change will make the projections more precise.
- There is a new section on orphans that calculates maternal, paternal, dual and total orphans due to AIDS and non-AIDS causes and can display all orphans or by single years of age.
- Updated patterns for the age and sex distribution of HIV are included and the interface with EPP has been updated to accommodate the new version of EPP that will be released in about one month.
- The latest changes in NewGen are included.

1.63 6/03/02

- Added French and Spanish Strings to PMTCT module.
- Adjusted SPT file reader in AIM to handle region specific data from EPP.
- Modified Aids deaths calculations for future years.

1.62 4/12/02

- Added Portuguese Strings.
- Modified limits in PMTCT Module and adjusted equations.

1.61 2/4/02

- Fixed last year calculation in AIDS Deaths display.
- Fixed Child AIDS summary. Female AIDS deaths were not displayed correctly.

1.57 8/6/01

- Fixed integer overflow problem in FamPlan displays.

1.56 6/4/01

- Added button in HIV prevalence editor to read EPP data.

1.55 6/4/01

- Fixed error in creating new MTCT projection.

1.54 5/24/01

- Added abbreviated names to MTCT editor.
- Added Distribution of Cost Pie chart to MTCT.
- Fixed mistake in Coale-Demeny West Male life table.

1.53 3/7/01

- Increased primary school enrollment rate in RAPID education sector.
- Added Male data support to NewGen.

1.52 1/11/01

- In AIM fixed the back casting routine so that it correctly calculates HIV prevalence and the sex ratio of prevalence during the back casting period.
- In DemProj corrected the displays of GRR and NRR to reflect the reduction in fertility due to HIV infection.
- In AIM corrected the calculation of AIDS orphans to reflect the reduction in fertility due to HIV infection.

1.51 1/02/01

- Added Portuguese support.
- Fixed problem with Male and Female AIDS births.

1.50 12/04/00

- Checked the file attribute on the Spectrum.ini file. Spectrum will not write to this file if marked read only.

1.49 11/28/00

- Fixed problem with population with-AIDS projection. AIDS deaths were not being subtracted out in latter years.

1.48 11/02/00

- Added MTCT module
- Fixed regional setting problem in Easyproj

1.47 7/13/00

- Fixed message dialogs with large fonts.
- Fixed Copy/Paste with regional settings.
- Modified NewGen Strings.
- Correction to calculation of proportion progressing to AIDS 20 years after infection.

1.45 7/13/00

- Fixed Commodity cost editor in SupplyPlan module.

1.44 6/15/00

- Fixed Life Expectancy read problem in Demproj.

1.43 5/26/00

- Fixed scaling on horizontal bar charts. Scale is displayed in the right margin.
- Changed input mask on Demproj Migration distribution by age to -999 to 999%.

1.42 2/24/00

- Modified Russian Strings.

1.41 2/17/00

- When using TFR goal, 5-year age groups and selected Model table, FamPlan was not loading the ASFR correctly from the tables.
- Fixed problem with AIDS summary screen with multiple projections loaded AIM.
- Corrected back casting procedure in AIM to use the new definition of HIV prevalence.
- Corrected calculation of HIV incidence in AIM.
- Fixed Negative number of HIV+ problem in AIM.

1.40 1/13/00

- Fixed problem in AIM where the calculation of AIDS Deaths overflowed assigned field. This would cause an Error in Spectrum when re-reading the projection from file.
- Fixed problem with disaggregating Users by source in FamPlan. This problem was introduced in version 1.38 with the "Users Need" fix.
- Added FPLM module (Beta).
- Added "BenCost" short name.

1.39 11/11/99

- Changed Russian strings.

1.38 11/05/99

- Fixed Reducing Unmet Need (Goal1) editor. TFR editor was not being displayed correctly. Number of users were not being displayed properly when disaggregating by need in Family Planning.
- Fixed Growth Rate display when disaggregating by source Family Planning.
- Removed the ability to disaggregate by need in Acceptors and CYP displays Family Planning.
- Changed Benefit-Cost's title caption in editor selection dialog.

1.37 10/27/99

- Changed Benefit-Cost's title caption in Config editor.
- Changed Perinatal Transmission Rate in DP to a time dependant input.
- Changed the conversion of old HIV age distribution to start at the 10-14 age group.

1.36 10/07/99

- Changed the way incidents were calculated based on new definition of prevalence that now includes AIDS.
- Fixed problem with accessing EasyProj.

1.35 9/27/99

- Changed the name of the FOCUS module to YARH.
- Modified French Strings.
- Added ability to convert old HIV age distribution input to new format when reading in file.

1.34 8/31/99

- Modified French Strings.
- Added EasyProj to Spectrum.
- Added Benefit-Cost Module.
- Changed the way HIV age distribution is inputted in AIM editor.

1.33 3/19/99

- Modified Spanish strings.

1.32 3/17/99

- Changed Total Abortion Rate's input range, under 5 year age groups, to 0-1000.
- Changed input range in prevalence editor to 0-100.

1.31 3/11/99

- Fixed default method selection in FamPlan for single indicators.
- Fixed HIV and STD Incidence calculation in Focus Module.

1.27-1.30 3/2/99

- Modified Spanish strings.
- Modified Arabic strings.
- Changed footer caption on Fertility Displays in Demproj to indicate Females.

1.26 1/27/99

- Spectrum will now except 0 for ASRF input in FamPlan.
- Modified FamPlan's read/write to handle large numbers in cost outputs.

1.25 1/20/99

- Added 3 decimals to Total Abortion Rate under 5 year age groups.
- Fixed labeling on Proximate Determinates under 5 year age groups.

1.24 12/3/98

- Added ability to aggregate multiple projections into one (Demproj Only).

1.23 11/18/98

- Removed Leed Courier font.
- Added the ability to disaggregate across single age in Demproj Defined Age Group Population display.
- Fixed duplicate and saving problem in Percent Married editor in Focus module.
- Changed Average Birth Interval to Median Birth Interval in Focus.
- Adjusted ASFR editor in Focus to accept standard ASFT numbers 0-999.

1.22 11/12/98

- Fixed problem with inputting negative numbers. This problem was introduced in version 1.20.

1.21 11/5/98

- Fixed abortions as a percentage of unwanted births in FamPlan.
- Fixed Chart Font selection. It was only working for displays in Demproj.

- Improved fit of Russian Strings in all modules.

1.20 10/20/98

- Fixed problem with thousand separator under regional settings being a space.
- Fixed problem with calendar dates showing up in editors with invalid entries.
- Added Russian text.

1.19 9/25/98

- Changed label of 'HIV Deaths' to 'AIDS Deaths' in Focus.
- Added inputs by marital status in Focus.
- Added ability for Focus to effect TFR and Births in DemProj.
- Modified dependency ratio calculation in DemProj to include last age group.
- Fixed problem in Cost Regression calculation in FamPlan.

1.18 7/27/98

- Fixed problems with five year age group calculations in FamPlan module.

1.17 7/10/98

- Fixed problems with the single age desegregation at the higher ages in DemProj.
- In DemProj migration editor, added ability to specify negative percentages for age distribution.

1.16 6/26/98

- Added a check to prevent user from adding more than 10 sources in FamPlan.
- Fixed problem when displaying FamPlan inputs when number of output lines exceeded 128 in spreadsheet.
- Fixed various translation strings in DemProj.

1.15 5/15/98

- Added Age selection to Graph label on FC displays.

1.14 5/11/98

- Fixed problem in DemProj editor that was causing the rural growth rate to be replaced by the urban growth rate.
- In DemProj, Fixed the urban population projection when using the method of urban-rural growth rate difference in a single year projection.
- In DemProj Summary Indicators, fixed the growth rate indicators when the urban or rural options are selected.
- Made slight modification to the way AIDS deaths are distributed by year. Previously, no deaths occurred in the year in which AIDS developed. Now some AIDS deaths can occur in that year, depending on the setting for the AIDS life expectancy.
- Added CYP display in FamPlan.
- Removed the Urban and Rural Selection from the AIDS section.

- Fixed problem with Installation. Program Icon was not being created with French and Spanish.
- Fixed source editor in Focus.
- Fixed editor captions in Focus.
- Fixed a problem with Focus calculations when adult HIV prevalence was zero in two sequential years.
- Fixed problem with saving negative numbers in the Focus module.

1.13 3/25/98

- Added spreadsheet clipboard feature to Protrain.
- Added FOCUS module.

1.12 3/3/98

- Saved the RAPID spreadsheet in Office95 format.
- Fixed a memory problem in Protrain when a projection is deleted.
- In DemProj, fixed a problem with switching between the options of "No urban/rural projection" to "Urban/rural projection".

1.11 2/2/98

- Added more statistics to reality check Protrain spreadsheet.
- Dropped the selection of TI in the Protrain spreadsheet.

1.10 1/29/98

- Added Percent of Acceptors/Users served by Cadre to reality check in Protrain spreadsheet.
- Fixed several strings in Protrain.

1.09 1/26/98

- Fixed problem with AIM data file saving and reading very large numbers.
- Added Sample data file.
- Changed installation script to include Sample data file component and backup option.

1.08 1/14/98

- Fixed module labels in projection editor to match module names in menu.
- Fixed problem when creating a new projection on a diskette. Does not require a subdirectory anymore.
- Added Protrain Module.

1.07 10/23/97

- Fixed FP problem in Cost per Users.
- Minor modifications to Urban population projection.

1.06 10/01/97

- Fixed problem with Urban population projections.

1.05 9/26/97

- Added Spanish support.

1.04 9/25/97

- Fixed a problem in DemProj in the calculation of the survival rate of the oldest age group.
- Added the scale multiplier to the display of migration in the DemProj summary output.
- In DemProj added code to sum the male and female urban and rural population by age.
- Fixed problem in RAPID in calculation of new households when more than one projection is active.
- Fixed problem with Pyramids scale label.
- Fixed Menu problem in AIM when language was changed.
- Took out check for 0-100 in ASFR editor. Now user can enter actual ASFR and then use the normalize button.
- Added the input ASFR table to the comparison graph.
- Added total for Males and Females in the HIV distribution editor.
- Changed Efficiency to Efficacy in AIM Measles variable name.
- Put a check for blank lines in the PJN file.
- Added French support.

1.03 9/19/97

- Fixed problem with year labels on pyramid for 5 year and 10 year intervals.
- Fixed problem with year labels on age group table for 5 year DemProj projections.
- Fixed Deaths calculation.

1.02 8/21/97

- In RAPID changed maximum and minimum values for labor force participation rate to 0 to 120.
- Added Arabic support.
- Fixed problem with years on display charts.
- Fixed problem in calculating pregnancies with Calculate Abortion option turned on.
- Fixed problem with urban population total in RAPID, ensuring that sum for both sexes is correct.
- Fixed problem with MWRA calculations in FamPlan.
- Turned on sex option of 15-49 population.
- Fixed problem with message box and Large Fonts.

1.01 6/25/97

- Changed RAPID education editor to allow zero values.
- Changed FamPlan Method Attributes editor to work correctly when no methods required attributes.

1.0 6/24/97 Initial release of Spectrum